Moral Realism, Evolutionary Debunking and Normative Qualia

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Summary

This thesis has two parts, a critical and a constructive part. The first part raises a set of challenges to moral realism. The second part provides a response to these challenges.

The first part begins by raising the possibility that morality is in some sense illusory. It then goes on to articulate two arguments that seem to point in this direction. Both arguments assume moral realism as the correct explanation of ethics. The first argument is a debunking argument aimed at debunking the epistemic validity of our moral intuitions. I argue that given what we know of the origin of our moral intuition we have no reason to believe that our moral intuition coincides with ethical truth.

The second debunking argument argues that the moral realist who believes in the existence of "mind independent" moral facts, will have a serious problem explaining how there is any connection between these and our evolved moral capacities.

These two arguments differ in scope and structure, but are deeply related as both grew out of a concern about how to make sense of the relation between moral facts and our evolved moral capacities in the light of modern biology.

In the second part of the thesis I try to lay the groundwork for a plausible naturalist moral realism and construct a view that can overcome the challenges raised in the first part of the thesis. Central to this view is the introduction of a concept of normative qualia. I argue that there exists a negative normative quale of painfulness, which is a reason to avoid it. I also argue that there exists a positive normative quale of pleasurableness, which is a reason to pursue it.

I give two arguments against epiphenomenalism about qualia. With these arguments I hope to subtract from the plausibility of competing views on pleasure and pain, views which are incompatible with the idea of normative qualia. At the same time I hope to prove the naturalistic respectability of normative qualia

I then go on to argue that if one accepts that painfulness and pleasurableness are moral facts, then one can expect that our moral intuitions track moral facts in certain situations and not in others, thereby partly exonerating our moral intuitions from the debunking argument leveled at them in the first part of the thesis. I then go on to address possible objections to the thesis, including G. E Moors "open question" argument, before concluding.

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1 Context and methodology

I hold that one of the most pressing philosophical challenges today is how to conceive of our newly gained knowledge in relation to our conception of ourselves? How can we integrate what the sciences tell us about the nature of reality with our non- or pre-scientific understanding of ourselves?

It is worth noting that our knowledge has not been growing uniformly. Its most impressive expanse has been confined to the so called hard sciences, physics, chemistry, biology, geology, etc... From these sciences we get a conception of reality that tells us that the universe consists of mindless meaningless physical entities. These entities are organized into systems. One type of these systems is particularly rich in heavy carbon-based molecules. These systems have evolved through a 3.5 billion yearlong process of random mutation and passive environmental selection. These systems are us, as well as the other animals and plants that inhabit this planet. The challenge is how to understand ourselves within this picture? How do we make our self-conception consistent with how we believe the world to be? Our self-conception includes ideas of freedom, consciousness, meaning, politics, esthetics and ethics. How must we conceive of these classical concerns of philosophy to make them consistent with the sciences?

This thesis focuses on the issue of ethics. The task is both to integrate our ideas of ethics with our scientific understanding of what we are and how we came to be, and to try to answer how we could possibly know moral truths if they exist. This raises the ontological concern whether there are moral truths at all? Do the picture of the world we get form the sciences leave room for such entities as moral facts, which could help us account for moral truth? It also raises an epistemological concern; if there are such things as moral truth how could we know them? How could it possibly be that our evolved cognitive capacities can have access to such truths? These questions may initially seem to daunting and one may suspect that the best way of addressing them is to dispense with the concept of moral truth altogether. In grappling with these concerns I will try to take seriously the possibility that the conception of ethics that we have been left by our cultural tradition may be seriously flawed. I will try to take seriously the uncomfortable possibility of moral nihilism. The idea that our whole conception of ethic is in error and that right and wrong is in some sense illusory, though this is not the view that I will end up defending. Rather I will offer a way of understanding moral facts that I hope will show how moral truth can exist as part of the natural world.

1.1 What is meant by naturalism?

The version of naturalism this thesis is committed to is the type of naturalism that Peter Railton (1989:86) calls methodological naturalism. The core of methodological naturalism is the belief that philosophical inquiry should work in tandem with, or on the edges of, scientific investigation. The philosopher and the scientist are both concerned about the same universe, the universe that they both inhabit. Philosophical investigations must therefore take account of relevant scientific insight. One cannot, for example, in any serious way work on the classical philosophical question of the nature of reason without taking account of modern psychology. Neither can one in any serious way engage the ontological question of what there is, without taking account of contemporary physics. Underlying this view is the belief that philosophical investigations harbor no special method with which it can attend substantive truths.

A methodological naturalist working on ethical questions does not seek to come up with a priory definitions of moral terms, like justice or the good, based on the analysis of these concepts and their common use. Rather the methodological naturalist seeks to come up with what, Railton terms, a post priory "reforming naturalistic definitions" of moral concepts. (Railton 1986:204) The method is synthetic rather than analytic. An analytic method seeks to find truth by analysis of the meaning of the concepts which it is investigating. A synthetic method on the other hand seeks to find truth by investigating how the world really is.

Even when seeking reformed definitions we must still ask if the new definition captures what is commonly meant by the concept, which one is seeking to redefine. Every term plays a distinctive role in our discourse and understanding. If the redefined term cannot take over at least the most central of these roles then it is not really a redefinition we are dealing with, but rather the construction of a new concept. This new concept can be useful, but to avoid confusion it should be given its own wording.

Take for example the term "water". A central function of this term is to denote the stuff that makes up the oceans and any reformed definition of water must retain this function. To propose a reformed definition of water that entails that water is not the stuff the oceans are made of is confused, and confusing. This new concept would be too far from our common conception of water to deserve the name. It is worth noticing that we seldom have definitions ready at hand for most of the concepts we use in everyday speech. Every definition is in some sense a reforming definition. The question is how much a reformed definition can differ from

the common conceptions of the concept one seeks to define before we are not talking about the same concept any more. The reform definition must, as Railton writes, remain "tolerably revisionist" (Railton 1986:205). There is no textbook answer to the question of what is "tolerable" and different people may evaluate this differently.

When evaluating the merit of a reformed definition we should ask "what is the explanatory value of this interpretation of the concept?" As reformed definitions:

> are put forward, not as analytic claims about the meanings of the terms involved, but as synthetic claims about the nature of the putative properties those terms refer to. They are to be judged, not by a priori means, but through a posteriori consideration or whether or not they provide good explanatory accounts of the nature of the practices involving the term. (Sinclair 2006:5)

To illustrate this point, when the American psychological associations glossary defines "Emotion" as:

> A complex pattern of changes, including physiological arousal, feelings, cognitive processes and behavioral reactions, made in response to a situation perceived to be personally significant. (Gerrig and Zimbardo 2002)[1]

Then this is not done to clarify its common meaning, it is not an analytic definition. Rather it is a synthetic definition and it is a god definition in so far as it is useful for explanatory accounts of the nature of the practices involving the term. Whether the new definition is naturalistically respectable or not depends on whether its putative property could feature in its own right in some scientific theory. This is the case for the definition of emotion, and I believe it is the case for all the definitions given in this thesis.

In arguing for moral realism I will follow what Railton calls "the generic stratagem of naturalistic realism". The stratagem consists in postulating: "A realm of facts in virtue of the contribution they would make to the a posteriori explanation of certain features of our experience." (Railton 1986:171)

For example, one may argue for the existence of the external world by pointing out that it explains best the coherence, stability, and intersubjectivity of sense-experience. This way of arguing flows from standard scientific thinking.

In standard scientific thinking one accepts the entities that one needs to give the best and simplest explanation of some phenomenon. It is a concepts explanatory power that grants

[1] American psychological associations glossary is reprinted from Richard and Zimbardo (2002)

it`s ontological legitimacy. The core of this line of thought is captured in the slogan: explanation precedes ontology.

It is this method of argument that will be employed throughout this thesis. Whether this thesis manages to live up to its own standard is ultimately for the reader to decide.

2 Are there moral truths and can we know them?

Part One

2.1 Our unease with evolution

Ever since Darwin's, On the origin of species (1859), there has been the fear that seeing ourselves as just another animal will undermine some of our value, and values. What happens to the sanctity of human life when one sees humans as just another animal? How can one justify western culture`s traditional prohibition against homosexuality, when one learns that homosexuality is a natural trait, that has coevolved in several different species? Ultimately the fear is that if we truly understand how our moral-capacity works, then this would ruin its normative force.

In the final chapter of The Abolition of Man C. S. Lewis (1943) gives expression to this fear. Here he describes what he sees as the ultimate consequences of this debunking, a distant future where a small group rules by a perfect understanding of psychology. Being able to see through any system of morality that might induce them to act in a certain way, they are ruled only by their own unreflective whims.

In several circles evolutionary theory is still regarded with suspicion or rejected. This should perhaps not be surprising, as evolution claims to explain why humans are as we are. An understanding of what we humans are is fundamental to any world view and in changing such a fundamental concept it necessarily transforms all concepts based on or related to it. The theory of evolution has probably changed our world view more than any other single theory. Daniel Dennett likened the idea of evolution to an acid and claimed that

> [Evolution] eats through just about every traditional concept, and leaves in its wake a revolutionized world-view, with most of the old landmarks still recognizable, but transformed in fundamental ways. (Dennett 1996:63)

The theory of evolution claims that there exists a biological mechanism of random variation and a historical process of natural selection and that this can be understood as a substrate-neutral algorithm "that operates at every level of organization from the macromolecular to the mental, at every time scale from the geological epoch to the nanosecond." (Sommers and Rosenberg 2003:1) This theory seems to undermine most predating world views and to a great extent the possibility for wishful thinking about what we are and how the world works.

Few people are uncomfortable discussing physiological traits of humans, such as the eye, in the light of evolution, and;

> In such cases evolutionary accounts of origin may provide much of what Greek thinkers sought in an arche, or origin – a unified understanding of something's original formation, source of continuing existence and underlying principle. (Katz 2002:1)

What it does not do is normatively justify the eye or ascribe to it any existential meaning. Explaining physiological traits seems to be unproblematic. But when it comes to mental and social traits a lot of people get uncomfortable. This is probably because physiological traits are not seen as wanting in normative justification or existential meaning while psychosocial traits often are. Few people crave a story that normatively justifies or renders some existential meaning to our prehensile thumb. Human pare-bonding on the other hand is a trait I suspect a lot of people feel differently about. Evolution should in principle be equally able to explain the origin of psychosocial traits as the origin of physiological ones. In this, it offers the possibility for the understanding of the arche of human morality, but it gives to it no normative justification and attributes to it no existential meaning. The fear is that evolution can explain both the capacities and performance of human morality in such a way as to dispense with any justification or meaning what so ever.

If our moral intuitions and our patterns of social behavior to a large degree are contingent on the historical development of our species, then they could have been different, if our historical development had been different. The randomness that lies behind us having just the moral intuitions we have, is striking. If one thinks that there is such a thing as moral truths and that what is not morally true is in some sense morally false, then the chanciness of our predicament is thought-provoking. Because it can seem to be, at best, a matter of luck that our moral intuitions are true rather than the thousands of different moral intuitions found in other species. And, it is not obvious how they happen to be normatively justified. This doubt was articulated already by Charles Darwin:

> But then with me the horrid doubt always arises whether the convictions of man's mind, which has been developed from the mind of the lower animals, are of any value or at all trustworthy. Would anyone trust in the convictions of a monkey's mind? (Darwin 1881)

The concern is that the theory of evolution may end up debunking some of our deeply held moral convictions, by showing us that they originate from evolutionary processes with no relation to moral truth. It may even raise the specter of nihilism, it may show us that from here on all points are equal and no course of action is really any better or worse than any other.

Truth can often be traumatic. It is not comforting to learn that our earth is not the center of the universe or that all energy is slowly but surely headed towards a steady state of inertia. But it is still, to the best of our knowledge, true. We should therefore be open to the possibility that evolutionary science might reveal some uncomfortable truths about our morality, if we dare to look.

2.2 What is epistemic justification and what knowledge would debunk it?

In the previous section I raised the concern that evolutionary theory may lead to some type of moral skepticism. I will now turn to the task of providing an argument to this effect. I am going to argue that what evolutionary science tells us about the origins of our moral intuitions shows us that moral intuitions cannot provide adequate justification for moral believes.

Before proceeding some preliminary notes on what a justification is, are necessary. This is not as easy as it may sound because beyond a few truisms and platitudes there is a bewildering degree of disagreement on the subject. There are many things that are commonly spoken of as being justified or unjustified: revenge, emotions, laws, etc. The kind of justification that is required for beliefs is termed epistemological justification. It is commonly believed that a belief can be justified but false, or unjustified but true. Epistemological justification is relative. For example:

> One person's belief that p may be justified while another person's belief that p is not justified. A person's belief that p may be unjustified at time t but later gain justification; or justified at time t but later lose justification. (Joyce 2012:4)

This is about all that is generally agreed upon among philosophers. I will argue that the evolutionary description of the causal origin of our beliefs pose a challenge to the justification of set beliefs.

To make such an argument one must ask: what is the relevance of causal information regarding the origins of ones beliefs in assessing the epistemic justification of one's belief? In what circumstances, and under what conditions, does the origin of a belief cast serious doubt on that belief? I hold that for a belief to be justified the process by which it is formed must be sensitive to the truth. It follows that the type of causal information that would undermine the epistemic justification of ones belief, is the type of causal information that shows that one's belief is formed by a causal process that one has no reason to think has any type of connection to the fact of the matter. Such a belief would be lacking in epistemic justification as it would be truth insensitive;

> Truth insensitive belief: a belief formed by a causal process than one has no reason to think has any type of connection to the fact of the matter.

If, for example, one was to form one's belief about the coming development of stock market prices by consulting the entrails of a bird, then one's belief about the coming development of stock market prices would be unjustified. Because there is no reason to believe that bird entrails and the coming development of stock market prices are connected.

One of the ongoing debates in epistemology is the debate between internalists and externalists in regards to justification. I believe that both internalists and externalists should accept that being truth insensitive makes a belief un-justified.

If one has a justified belief, one is sometimes also aware of that which justifies the belief. Other times one must reflect to become aware of that which justifies the belief. The core idea behind justification internalism is that one must have some access to that which justifies the belief, for a belief to be justified. [2] How access is to be understood and how much of that which justifies the belief one needs access to for a belief to be justified is a matter of controversy.

Justificatory externalism, on the other hand, holds that one needs not have access to that which justifies ones belief for ones belief to be justified. This may seem plausible if one

[2] For an example of a internalist position, see: Prichard (1950)

considers the example of a dramatic situation. If a fire breaks out in one's apartment one may unreflectively engage in frantic action, trying to save life and property. It seems unlikely that a person in such a dramatic situation could be able to reflectively access what justifies his or her beliefs. But, it may seem wrong to claim that the beliefs that the person was acting on where un-justified. Externalism is often held in conjunction with some reliabilist conceptions of justificatory criteria. [3] The core of reliabilism is the view that a belief is justified if it is based on a process which is reliable. There are different views on what it takes for a belief forming process to be reliable. But, all agree that a reliable process is one that produces mostly true beliefs.

If a belief is found to be truth-insensitive, then this should give rise for concern, both for internalists and reliabilists about justification. Because, the internalist cannot recall that which lead them to the belief to gain justification of it and the reliabilist has no reason to think that the process that formed the belief is reliable, if the belief is fund to be truth-insensitive.

2.3 What are moral intuitions?

In this section I will make clear the target of the debunking argument by specifying what I mean by moral intuitions. I define moral intuitions as;

> Moral intuitions: Affective patterns and/or evaluative tendencies that affects ones understanding of who to help, harm and/or what the `appropriate` social relations are.

This reform definition retains the central functions of the common conception of moral intuitions. It encompasses intuitions about tree concerns that cover most if not all of what we in common speech talk of as moral questions. That is; who should we help, who should we harm and what are the appropriate social relations.

I will offer some examples that hopefully will make clear that these three types of questions covers most if not all of what we normally think of as issues of morality. An example of a `who should we help` type moral question, is who should get and how much should be given in foreign aid. An example of a `who should we harm` type question is the debates round what the criteria for criminal culpability should be. A `what is appropriate social relations` question is the debate around what should be the minimal age of consent.

[3] For an example of a reliabilist position, see: Goldman (1979).

With `evaluative tendencies` I mean simply any tendencies of unreflectively taking or seeing something as counting in favor of, calling for or demanding some action. By affective pattern I mean any identifiable pattern of emotional responses to certain type of occurrences.

An example of a affective-pattern relevant to a question of `who to harm` may be the anger that one feels when hearing of cases of child molestation, which may lead one to believe that punishment is due. A case of an evaluative tendency that is relevant to a question `who to help` is when one unreflectively takes the fact that someone belongs to their in-group as counting in favor of helping them. Both of these cases are examples of moral intuitions.

Moral intuitions often lead us to form moral beliefs, like in the example given above. I will here sometimes refer to them as "belief-forming mechanism". I use the term "belief-forming mechanism" about any odd mechanism that gets us to form some belief, be it our visual system or some bias or heuristic.

2.3.1 Moral intuitions are not exclusive to humans

It is worth noticing that this definition of moral intuitions does not render moral intuitions exclusive to humans. In this it follows the thinking of researchers like Sober and de Wall (See: Sober 1990, Sober and Wilson 2000, de Wall and Flack 2000). The underlying commitment that supports this view is a commitment to evolutionary parsimony: It posits that if closely related species act the same, then the underlying mental processes are probably the same too. The alternative would be to assume the evolution of divergent processes that produce similar behavior, which seems a wildly uneconomic assumption for organisms with only a few million years of separate evolution.

To illustrate this point consider the case of inequity aversion in monkeys. It has been demonstrated that nonhuman primates like the brown capuchin monkey (Cebus apella), responds negatively to unequal reward distribution in exchanges with a human experimenter.

> Monkeys refused to participate if they witnessed a conspecific obtain a more attractive reward for equal effort, an effect amplified if the partner received such a reward without any effort at all. (Brosnan & de Wald 2003:1)

We should out of considerations of evolutionary parsimony understand the monkey's behavior as driven by a process similar to that which drives similar behavior in humans. The monkey felt anger and frustration at being treated unfairly. This affect leads the monkey to refuse participation in the experiment.

This affect is probably somewhat similar to the anger and frustration felt by the African-American longshoremen of Galveston before the strike wave of 1877. African-American longshoremen were at the time paid far less than their white co-workers. Anger at this unfair treatment lead them to rise up and they won the right of equal pay for equal work. (See: Coates 2009:206-207)

Moral intuitions are not exclusive to humans. It is furthermore likely that there is a significant continuity between the moral intuitions of humans and those of mammals in general and primates in particular.

2.4 Moral intuitions as a method of ethics

In this section I will point out that our moral intuitions are commonly used as a method for testing the validity of moral principles. I will then question whether moral intuitions can play this role. This skepticism will of course put limitations on the type of arguments that are given in this thesis. Anyone who has ever studied philosophy will recognize dialogs such as this:

> Philosopher A: based on the previous analysis, I propose the following moral principle P: Actions of the type X are permissible if and only if conditions x, y and z are met. Philosopher B: While your analysis seems sound, P must be rejected because here is a counter-example in the form of a case where conditions x, y and z are met, but because conditions f, g and h also obtain, we have the intuition that actions of type X are impermissible (Elster 2011: 241)

It is worthwhile to dwell on just how queer this type of inquiry really is. When philosophers ask questions such as "what is the morally right thing to do in scenario X", they in some sense assume that they already have the answer. In so far as finding the answer is seen as a matter of getting clear on the moral intuitions they already have latent within themselves. When our moral intuitions, in a given scenario, correspond to the proposed ethical principle, then this is usually taken as justifying the principle, in that situation. What seems paradoxical with this way of going about asking and answering the question is that the question is raised based on an assumption of ignorance, but at the same time the usual way of answering presupposes that the answer is self-evident, in the sense that getting the answer is a matter of getting clear on what we already believe.

When the principle in the given scenario comes in conflict with our moral intuition, it is usually understood as undermining the principle, not our moral intuition. It is customary to argue that these intuitions make it possible for us to test the validity of a given moral principle. If a given principle P claims that a behavior X is correct whenever factors a, b and c

are present, and one can find a hypothetical scenario where a, b, and c are present but where X is intuitively incorrect, it is seen as an argument against the given principle P. But, it is not obvious that we should understand the conflict between the moral analyses and the moral intuition as undermining the analyses and not the intuition. This way of arguing for or against a principle assumes that moral intuitions provide adequate justification for moral beliefs.

The philosophers that use moral intuitions in this way are not naive about it. They know that one cannot confirm or dis-confirm a moral principle simply by considering isolated moral intuitions. Our moral intuitions may conflict with one another and there may be other relevant considerations that one needs to take into account. They therefore try to carefully weigh the different relevant considerations to reach a reflective equilibrium.[4]

The method of reflective equilibrium consists in working back and forth among our moral intuitions about particular cases, the moral principles one is committed to and other relevant philosophical commitments in an attempt to achieve some level of coherence among them. However sophisticated these evaluations may be they still build on the belief that our initial pre-theoretical moral intuitions carry some justificatory weight.

2.4.1 Questioning the epistemic validity of our moral intuitions

In this section I will entertain a hypothetical scenario where common moral intuitions conflict with what seems like a sensible moral principle. It is possible to give an evolutionary explanation of the intuition in question. But, this explanation makes no reference to what is actually morally true. I will argue that this explanation of the intuition should lead us to suspect that the intuition, and any subsequent moral belief formed on the basis of the intuition, is lacking in epistemic justification. Imagine a moral principle X that claims:

> Principle X: Sexual intercourse between two agreeing adults both of whom enjoys the experience and which doesn't hurt any others is good.

Most liberal minded people would probably be willing to accept this principle and within a utilitarian paradigm it would obviously be correct. Psychologist Jonathan Haidt suggests we reflect over the following scenario:

[4] The notion of a reflective equilibrium was first introduced by John Rawls (1971) in his theory of justice

> Julie and Mark are brother and sister. They are traveling to get here in France on summer vacation from college. One night they are staying alone in a cabin near the beach. They decide that it would be interesting and fun if they tried making love. At very least it would be a new experience for each of them. Julie was already taking birth control pills, but Mark uses a condom too, just to be safe. They both enjoy making love, but they decide not to do it again. They keep that night as a special secret, which makes them feel even closer to each other. (Haidt 2001:1)

This scenario is objectionable to most people, even though many of those who see it as intuitively wrong would accept principle X.

An aversion to incest is found in a great number of species. That some of our most basic moral intuitions are not exclusive to our species suggests that these are very old. Those evaluative tendencies that we share with other primates presumably arose and became entrenched in our ancestors before the development of language, which, in an evolutionary perspective, is a rather recent phenomenon. (See: Flack and de Waal 2000) We humans have both these moral intuitions that motivate certain behavioral responses to certain circumstances and a cognitive reflective capacity. Our cognitive reflective capacity allows us to see one thing as counting in favor of another, to make moral principles and to step back from them and call them into question.

From an evolutionary viewpoint the intuitive wrongness of incest is easily understandable given that children of siblings have a lower survival rate. So attraction between siblings is selected against. The mechanism through which evolution seems to hinder sex between siblings is by the creation of an affective pattern of antipathy towards it; that is by making it feel disgusting and wrong. (For an overview of incest avoidance, see: Wolf 2006)

We can be pretty sure that selection pressures have been central in shaping the content of human moral intuitions. If a trait is present in the human phenotype then this is because it increases fitness, or it is a spandrel, a byproduct of selection for some other trait. (See: Gould and Lewontin 1979) It seems highly implausible that a significant amount of our moral intuitions are spandrels given the enormous potential fitness benefit in making certain evaluative judgments rather than others. In addition several of our core moral intuitions are found in a number of other species, something that makes it even more unlikely that these are spandrels.

The mere fact that most find it intuitively wrong does not necessarily give justification for the belief that it is wrong. We know what conditions it was that formed the moral

intuition. In the Mark and Julie scenario we know that these conditions are no longer active, since it is near impossible that the intercourse results in a child. So even if one believes that these conditions generally can function as reasons for judging incest as wrong, they cannot do so in this case.

It is worth noticing that the propose explanation of the origin of the moral intuition makes no reference to what actually is morally right. This may lead us to suspect that beliefs formed on the basis of this moral intuition would be truth insensitive, as they would be formed by a causal process that one has no reason to believe has any type of connection to the fact of the matter.

2.5 Truth-tracking

In this section I will introduce the concept of truth-tracking. A truth- tracking trait is simply a trait that has been selected for forming beliefs that correspond with the facts they are about.

This argument assumes realism and what Philip Kitcher (2002) calls a "modest Correspondence Theory of Truth." It assumes that true statements make reference to entities in the world and are true by, in some sense, corresponding to them. I believe that we cannot make sense of the predictive successes and interventions of modern science without these assumptions. (For an argument to this effect, see: Kitcher 2002) I therefore take these assumptions to follow from the methodological commitments spelled out in section 1.1.3.

A trait that has probably been selected for corresponding to the facts that they are about, is the human visual system. The visual system may produce a representation of a tree that is right in front of one. This normally corresponds to the fact of there being a tree there. We know this to be the case because if we do not pay heed to the representation we normally crash into it. The ability of navigating obstacles, as well as the ability to identify food and predators, certainly enhanced our ancestor's fitness. There has therefore almost certainly been selection for visual representations that correspond to the matter of fact, which they are about.

There is nothing mysterious about truth-tracking. Paul E. Griffiths (2011) has suggested that truth-tracking should be understood as an ecological property, akin to other ecological properties like foraging efficiency. As such it is a valid biological concept and it may help explain the increase or decline of some population. We may explain why some forager specie is declining in population and another is increasing by reference to their

foraging efficiency. The declining species may be a bad forager, it may use a long time on patches of grass that are almost completely depleted of nutritional value. While the increasing species may be a good forager, it may leave depleted patches fast and quickly finding a better spot. Similarly, the spread of some type of primate and the decline of another may be explained by their differing truth-tracking abilities. The increasing species may be better at forming veridical representations of the world giving it an advantage.

2.5.1 Selection for and selection of

If a truth- tracking trait is any trait that has been selected for forming beliefs that correspond with the facts that they are about, then it is important to get clear on what selection for means. I believe that it is worth going in to a certain amount of detail on this issue. As there has been some controversy in the philosophy of biology over how to understand what "selection for" means. Some have even questioned the scientific validity of the concept. (E.g. Fordor and Piattelli-Palmarini 2010)

In contrast I believe that the concept is extremely useful and rather straightforward. I believe Griffiths hits the nail on the head when he states that much of the controversy surrounding the "selection for or selection of" distinction is a product of philosophers own misuse of the concept. (Goode and Griffiths 1995)

The distinction between "selection for" and "selection of" was first introduced by Elliot Sober (1984). For there to be selection for some property, that property has to cause an increase in fitness. "To say that there is selection for a given property means that having that property causes success in survival and reproduction." Selection for is to be contrasted with selection of. "'Selection of' pertains to the effects of a causal process, whereas 'selection for' describes its cause (…) There being selection for a particular property (...) means that a causal process is actually in motion" (Sober 1984:100) `Selection for` is, as Sober writes, a "causal concept par excellence".

It is possible to distinguish the properties which there are selection for from those which there is only coincidental selection of. They can be distinguished by the fact that only the targets of 'selection for' play a causal role in the selection process. To determine if some particular property has been selected for we ask would this trait have been selected if it was not for this property. The fact of what was selected for comes down to the truth of certain counterfactuals.

To illustrate this point think of the thick fur of a polar bear. Polar bear fur has been selected for the property of being warm. A byproduct of this selection for being warm is the selection of the property of being heavy. When one seeks to determine whether there has been selection for or of some property, one should ask whether there would have been selection for this trait without this particular property? In this case we conclude that the warm fur would have been selected for even if it was not heavy. But, that heavy fur would not have been selected for if it was not warm.

It may be the case that the origin of a trait involves selection for more than one property. If that is the case then the correct causal story of the origin of the trait would be some statistical aggregate of the fitness value of the different properties that there has been 'selection for'.

To illustrate this point we may imagine that polar bear fur has been selected for being warm and for being sexually attractive. The fitness value of the different properties is simply a matter of how many more genes are spread as a consequence of having warm fur and how many more genes where spread as a consequence of having fur that is sexually attractive. Finding what degree the different properties have been selected for is simply a matter of somehow statistically aggregating their fitness value. This means nothing more than finding a way of counting a lot of mundane facts about polar bears freezing to death and getting laid.

2.5.2 Truth-tracking and truth sensitivity

I will argue that beliefs formed by a belief forming mechanism that is truth- tracking will be truth sensitive. I will also argue that a belief formed by a mechanism that is not truth-tracking will, generally, be truth insensitive.

If the origin of a belief-forming mechanism includes selection for forming beliefs that correspond with the facts that they are about then this is a reason to believe that the beliefs it generate will have some connection to the fact of the matter, which they are about. Thus, a belief formed on the basis of a belief-forming mechanism that has been selected for truth-tracking will be truth-sensitive. If selection for truth-tracking plays no role in the explanation of the origin of some belief forming mechanism, then one will generally have no reason to believe that beliefs formed by this belief forming mechanism are truth-sensitive.

I qualify this statement to leave room for the possibility that a belief may be truth-sensitive, even if a belief's origin is truth-insensitive, if it is pragmatically successful.

Pragmatic success may be a reason for believing that the belief has some connection to the facts of the matter and what it is about. I will brush this issue aside as such pragmatic considerations do not seem relevant to the field of ethics.

It is worth noticing that truth-tracking really is not that stringent a criterion. A belief forming mechanism must not have been evolutionarily optimized for making veridical representations for the beliefs it generates to be truth sensitive. Even if there has been evolutionary optimization for truth-tracking this optimization would still include cost-constraints and intrinsic task –constraints. (See: Smith 1978 and Godfrey-Smith 1991) Pointing out that one is prone to make erroneous judgments on the basis of some belief-forming mechanism is not enough to show that this belief-forming mechanism is truth-insensitive, because the belief-forming mechanism can still have been selected for making true beliefs.

2.5.3 An example of a truth-tracking trait

In this section I will present a case of a belief-forming mechanism that is not truth tracking. Beliefs formed by this mechanism are therefore lacking in epistemic justification. If we cannot show that our moral intuitions differ from this mechanism in a significant way then we will be forced to conclude that beliefs formed on the basis of our moral intuitions also are lacking in epistemic justification.

Let us consider the case of unrealistically positive self-evaluations. There are good scientific reasons to believe that humans have been hard-wired by natural selection to systematically make unrealistically positive self-evaluations. Most people believe themselves to be better than average in most domains. This includes supposing themselves to have an above average ability to resist the temptation to make unrealistic positive self-evaluations.

It has been argued that unrealistically positive self-evaluations increases fitness by contributing to beneficial self-representations in conflict situations (See: Hippel and Trivers 2011). In this case there seems to have been selection for unrealistically positive self-evaluations. The faculty that produces this intuitive evaluation has not been shaped so as to track the truth.

The evaluative tendency was not formed to produce accurate self-appraisals, but to produce self-appraisals that are beneficial in conflict scenarios. The intuition that tells us that we are better than average, is not a proper justification for the belief that we are, as we know

that this intuition is not truth-sensitive, therefore self-evaluations that are made intuitively, and without serious reflection, lack epistemic justification.

If our moral intuitions about the brother-sister incest example given by Jonathan Haidt (2001) cannot be shown to differ in some significant way from the self-appraisal intuition, then it can provide no justification for a belief. If truth-tracking does not somehow enter into the explanation of the origin of the intuition then beliefs formed on the basis of it are truth-insensitive and as such lacking in epistemic justification. Most people's response to Jonathan Haidt's scenario may like most self-evaluations lack epistemic justification for the same reasons. There is a difference between a belief being unjustified and a belief being unjustifiable. There are ways to justify one's belief in being above-average and there may be good justifications for condemning Julie and Mark, but one's moral intuition is not one of them.

2.6 The moral significance of family and fatherland

In this section I will look at the case of group-bias. I will use it to point out that it is easy to be inconsistent in the way we evaluate the moral relevance of our intuitions. I will also point out that we in some cases find it easier to take a scientific explanation as debunking our intuitions than in others. I will suggest that this is due primarily to the strength of the intuitions affective pull rather than any difference in there epistemic validity.

Let us consider the case of in-group–out-group bias. We humans are social animals and we live in groups. There is evidence that humans have an innate tendency to favor their own group over others. The early twentieth-century sociologist William Sumner claimed that; "Each group nourishes its own pride and vanity, boasts itself superior, exists in its own divinities, and looks with contempt on outsiders" (Hogg and Cooper 2007:334)

This may be a bit harsh, but there is evidence that positive in-group descriptions and negative out-group descriptions are abstract and vague, while negative in-group descriptions and positive out-group descriptions are specific and observable. If a person from one's own group is known to be rude, this trait is easily attributed to the individual, as the belief that "this person is rude". If one from an out-group is known to be rude, this trait is easily attributed to the group as a whole, as the belief that "those people are rude". The reverse is the case for positive beliefs.

The problem is that general statements are vague and harder to prove wrong, while, concrete statements are specific and easy to brush off as exceptions to the rule, thereby strengthening stereotypes (Kubota, Mahzarin, Banaji and Phelps 2012). This tendency seems to be hard to avoid. "Even when deliberately resisting out-group negativity in attitude formation and transfer, people appear unable to avoid it implicitly" (Stark, Flache and Veenstra 2013:608).

The most disturbing findings are probably those made by Elizabeth A. Phelps, who has been working on the neurology behind group bias. She has pioneered work on the topic and there are now a number of studies that have found greater amygdala blood activity in response to out-group race faces than to in-group faces. The amygdala is comprised by a group of nuclei that are central in the acquisition and expression of classical fear conditioning. When flashing pictures of different ethnic groups before an individual, one can observe a general tendency for differentiated neuronal activation patterns in response to in-group faces and out-group faces. The flashing of the faces is done at a high speed and the reaction time is so fast that it indicates that the differentiation is unconscious, and involves no conscious thought (Kubota, Mahzarin, Banaji and Phelps 2012.)

It is not hard to come up with a possible evolutionary explanation for this phenomenon. Individuals that had an in-group–out-group bias may have had several advantages over groups that did not. Yet most of us living in liberal and multicultural societies find this evaluative tendency problematic. Few of us would, hopefully, accept the fact of the innate tendency towards hypocrisy as a good argument for it being morally justified. What the case of in-group–out-group bias makes clear is that the fact that we have an intuitive tendency to make a judgment is not a justification for that judgment.

We have come to a cultural understanding that sees this type of group bias as problematic. Few take the fact of this evaluative tendency to make these hypocritical evaluations as a justification for those evaluations. But, when it comes to smaller groups like the family, we generally seem untroubled by the move. We seem to have a predisposition towards intuitively thinking that one is more blameworthy for not taking care of one's own children than failing to take care of other people's children that needs to be taken care of, but is this intuition justified?

Most parents strongly react to any injury or injustice committed against their own children. Injury or injustice committed against one's children often elicits a strong emotional response. The emotional response calls the parent to action and to the aid of their child. These same people might step past starving street children and, although the experience may

provoke some discomfort, in only a few cases does it drive people to action. This evaluative tendency is easy to understand, both emotionally and evolutionary. Because parents that discriminate in the care they give to the plight of their children and the plight of others, will have a fitness advantage over those who do not. Therefore discriminatory care behavior would invade any population. Evolution often favors the selfish. Because those who care more about their own children will on average have more children that live until reproductive age than those who do not. This way evolution ensures that we care more about our own children's pain than that of others. Because of this, we are likely to think we have good reasons to care more about our own children than others. The reason for the existence of the intuitive moral difference between providing care to one's own children and those of others is likely based in the fitness advantage it provided our ancestors.

If we are to evaluate the normative standing of the intuitive morale difference we must ask; what is the normative significance of our ancestor's fitness advantage? There may, theoretically, be good moral reasons for caring more about one's own children, but one's moral intuition is not one of them.

2.7 The arbitrariness of our moral intuitions

I this section I will show how gaining scientific understanding of some moral intuitions may undermine them by revealing their arbitrariness. Also non-scientific investigations of our moral intuitions may reveal their arbitrariness. (E.g. Peter Unger 1996) The only difference being that scientific work is more descriptively definitive.

Imagine two variations of the so called "trolley problem". In scenario one you see a trolley running towards five workmen without any chance of escaping. It is, however, possible for you to pull a handle that would shift the trolley to another line, where there is only one single worker that would be killed. If you do nothing, five workers are killed, if you pull the handle, one worker is killed. Most people are willing to claim that it is correct to pull the handle and kill one person saving the other five. Now, imagine another scenario where a trolley is heading towards five workers without any possibility to escape. From where you stand, you could push a fat man in front of the trolley, thereby stopping it. Most people do not find it morally acceptable to do so in order to save the five workers. (Greene 2013:114) The consequences in these two scenarios are the same, but our moral intuition differs. In the

article “Pushing moral buttons: the interaction between personal force and intention in moral judgment” moral-psychologist

Joshua D. Greene tests a set of variations of the “trolley problem”, trying to identify what it is that provokes the intuitive moral difference. Greene concludes that “harmful actions were judged to be less morally acceptable when the agent applied personal force”. (Green 2009a:21) “Personal force” is defined as any direct effect generated by the other person's muscles. Joshua D. Greene suggests the hypothesis that moral dilemmas, as the two trolley scenarios, cause different emotional responses and that this affects people's moral choices. In “An FMRI investigation of emotional engagement in moral judgment” Greene (2001) and his colleagues claims to have identified significant differences in brain activity when solving moral problems involving personal force and those which do not.

Out of these findings Green developed a dual-processing theory that aims to explain why we intuitively find a significant moral difference in scenarios like the first and second trolley problem. (Greene 2009b) Green speculates that the difference in the intuitive responses to the different scenarios is a product of evolved adaptation for social living. It has been speculated that in humans there has been selection for an antipathy against killing another human being who is not regarded as an enemy or a threat, with physical force. On the other hand, it is unlikely that there has been selection for an antipathy towards pulling switches. A scientific explanation of this kind raises questions about the normative validity of moral intuition, as it seems to follow a rather arbitrary distinction.

2.7.1 Concluding remarks

The normative value of our moral intuitions is not self-evident. We cannot without further argument take a conflict between a moral principle and a moral intuition as an argument against the principle. As our descriptive understanding of what morality is grows and as we “see through” more and more of the system of morality that might induce us to act in a certain way, it gets harder to see why we ought to do so. As the knowledge of what morality is grows, it seems to leave little room for claims that it ought to be like that. In this sense our predicament resembles the rulers in C.S. Lewis (1943) “Abolition of man”.

Some readers may still have a positive inclination towards the intuitive discrimination that most people make between the two trolley scenarios. This may be because of legitimate philosophical disagreement; the reader may for example be a Kantian deontologist and hold the view that no human should be used as a means to an end, or it may come from the fact that

one just automatically believes it to be right. I think we should also entertain the suspicion that some may be inclined to hold such philosophical views because of our intuitive moral evaluative tendency.

3 Evolutionary arguments against moral realism

I have argued, hopefully somewhat convincingly, that our intuitive evaluations provide no justification for our moral beliefs. In the article "A Darwinian dilemma for realist theories of value" Sharon Street (2006) claims that taking evolutionary science seriously should undermine any belief in realist moral values. In this chapter I will present a version of the first horn of Streets paper. I believe that her argument is successful and that it shows us that beliefs in mind-independent moral facts are untenable. Before going on to present the argument some preliminary notes on moral realism seem appropriate.

3.1 Moral realism

Moral realists believe that there exist entities such as moral truths. They hold the view that moral truths such as ϕ (E.g. Torture is wrong) functions as normative justifications for ψ (E.g. not Torturing), that ϕ is right and that one ought to conform to ψ. But, from what are realist moral values independent? A canonical answer is that moral realism recognizes specifically the mind-independence of moral values" (DeLapp 2013:12). I believe that it is the moral realists that hold this canonical view that have the greatest problem answering Streets argument.

Street understands moral realism as the view that "there are evaluative facts or truths that hold independently of all our evaluative attitudes." (Street 2006: 3) There are two main types of moral realism, naturalist moral realism, which sees evaluative truths as reducible, or supervening on, natural properties or facts; and non-naturalist moral realism, which claims that moral truth are constituted by certain non-natural properties or facts, that is properties or facts that are in some way significantly different from the properties and facts dealt with in the sciences. Both types of moral realism are targets for the argument put forward by Sharon Street.

3.2 Is there real moral truth out there somewhere?

The starting point of Streets argument is the belief that selection pressures have been central in shaping human evaluative tendencies. It is unlikely that the evolutionary process has not

been central in shaping the content of human moral intuitions, because there are enormous potential fitness benefits in making certain evaluative judgments rather than others. Consider for example some of the moral intuitions discussed in this thesis.

> Most people take the fact that someone is part of their close family as a reason to see them as unfit to be sexual partners.
>
> Most people believe they have a greater obligation to help their own children than they do to help the children of complete strangers.

There are an endless number of possible judgments we could have made, so why do we make just these? Why do we not view close family as the most attractive sexual partners? Why are we not blind to our own children's misfortune while we rush to alleviate the suffering of other people's children in faraway places? Imagine a type of humans that had the inverse evaluative tendencies:

> Most take the fact that someone is part of their close family as a reason to see them as a preferable sexual partner.
>
> Most believe they have a greater obligation to help other people's children than they do to help their own children.

Were this type of humans ever to exist they would have had a short history indeed. The first sets of intuitions are found in all human cultures and they are probably not exclusive to humans. They are found in other primates and perhaps in a range of other animals. Mammals in general and primates especially exhibit similar parental care and incest aversion behavior. The most evolutionary parsimonious conclusion is that this is behaviors that are, at least in primates, driven by a similar mechanism to that found in humans.

If one did not know of evolution the fact that most people hold the first set of beliefs and not the second could have been seen as an indication of the existence of independent moral truth. In previous times, the very consistency of moral beliefs was taken as an argument for the existence of moral truth. But, the hopefully uncontroversial premise of this thesis is that modern humans were formed by a biological mechanism of random variation and a historical process of natural selection, known as evolution. Evolution can explain why we have the first and not the second set of evaluative tendencies. For those individuals that throughout evolutionary history have had evaluative predispositions detrimental to their

fitness have been out-competed, while the genes of those individuals that throughout evolutionary history have had evaluative predispositions beneficial to their fitness have been spread. This process has selected for evaluative responses to situations that are beneficial for one's fitness. Street calls the view that our moral intuitions have been selected because they got our ancestors to respond to their circumstances with behavior that promoted reproductive success in fairly obvious ways, "the adaptive link" hypothesis (Street 2006:134).

The challenge to any believer in independent moral truths is to explain the relation between evolutionary influences on our evaluative tendencies on the one hand, and these independent moral truths on the other. One could of course claim that there is no relation. No connection between the evolutionary influences that have shaped our evaluative attitudes and independent moral truths. But, this must lead to the skeptical conclusion that most of our evaluative judgments are hopelessly distorted due to selection pressures, and one would still have to provide an argument for the existence of moral truths. As Sharon Street points out:

> By understanding evaluative truth as ultimately prior to our evaluative judgments, realism about value puts itself in the awkward position of having to view every causal influence on our evaluative judgments as either a tracking cause or a distorting cause. (Street 2006:155)

This makes it seem as if the only consistent way to believe in both evolution and in such entities as moral truths and not come to this skeptical conclusion is to claim that evolution in some way tracks these moral truths. Street calls this view the "truth tracking hypothesis." (Street 2006:155) This can of course be the case, but to claim so is to make a scientific claim. As a scientific claim it is subject to the same criteria of evaluation as all other scientific claims. Comparing competing scientific hypothesis minimally includes comparing the theories explanatory and predictive power, their parsimony and how well they integrate with the rest of the sciences.

Let us compare the truth tracking hypothesis with the adaptive link hypothesis. The adaptive link hypothesis makes an informative claim by pointing out that our evaluative tendencies are going to be shaped so as to generally conform to that which increases fitness. From this hypothesis, we can make predictions as to a species' evaluative tendencies. It is parsimonious and integrates seamlessly with the rest of biology being, as it is, a prediction that follows from standard evolutionary theory.

The truth tracking hypothesis, on the other hand, claims nothing informative. Stating that our evaluative tendencies generally conform to moral truth raises more questions than it answers. Why did making true judgements increase reproductive success? It is not adequate just to say: "because the judgments are true". This loss of explanatory power is gained at the expense of simplicity, positing more entities than the adaptive link hypothesis. In addition the theory does not sit well with the rest of biology, relying as it does on strange entities known as moral facts, unheard of in the rest of the sciences. Street claims that this truth tracking hypothesis does not fare well. I believe Street does right in this, her argument raises a considerable challenge to any moral realism.

3.3 Answer to objections

There are several ways one may try to address the challenge raised by the type of evolutionary debunking that Street and Green argues for. One way is to claim that these types of debunking arguments do not work. Another is to construct an ethical theory that can answer them. In this section I will examine and reject tree different objections to evolutionary debunking of the kind presented in this thesis.

3.3.1 Objection one

The kind of evolutionary debunking arguments put forth in this text try to undermine the validity of a belief by pointing to the origin of the belief. Roger White claims in an article arguing against various skeptical arguments that:

> Of course explaining a belief poses no threat to the belief as such … the truth of an explanation of my belief that p that makes no reference to whether p doesn't by itself pose any threat to the justification of my belief. (White 2010: 582)

I think this is a too general statement. Could one really believe the narrative given in Friedrich Nietzsche's (1887) "On the Genealogy of Morality" and still be a devout Christian? It seems that at least in certain occasions the explanations of belief-formation poses serious threat to the justification of a belief.

Take for example the real life experience of an acquaintance of mine. He was often convinced that the people sitting behind him on the tram were talking about him. He was diagnosed with paranoid schizophrenia. It was explained to him that due to his condition he

was likely to believe this whether it was true or not. With time that explanation of his belief, on good days at least, undermined the belief that people were talking about him. Even though the explanation made no specific reference to whether his belief was unjustified on any single occasion. People might well have been talking about him, but the explanation of his belief-forming had undermined his capacity to judge any single occurrence of the belief leading him to a skeptical attitude about whether or not people were talking about him. I find this analogue to the sort of evolutionary debunking I am putting forth. This type of debunking arguments shows that our moral intuitions are not truth sensitive and this undermines our capacity to make certain types of inferences.

My acquaintance learned that he could not trust his senses in particular situations because he occasionally suffered from auditory hallucinations and his experience was not truth sensitive. This still left many ways for him to find out if people were talking about him. He could for example ask to get his experiences confirmed or disconfirmed by someone else. Analogously we have no reason to think that our moral intuitions are truth sensitive and we, like he, should be led to a skeptical attitude towards our ability to make a certain type of inference, namely ethical inferences from moral intuition. We, as well as him, are still left with other ways of finding justifications for our beliefs.

The explanation of belief-formation should cast doubt on the content of a belief in certain circumstances, and it often does. Although correlation does not prove causation I think it an unlikely coincidence that psychiatrists have been found to be the least religious of all medical professionals, as knowing something about belief formation certainly can undermine some types of believes (University of Chicago Medical Center 2007).

3.3.2 Objection two

In the article "Evolutionary Debunking Arguments" Guy Kahane argues that the debunking arguments of the type put forth by Joshua Green only are valid if one presupposes some kind of objectivism. If true, this would mean that this thesis is redundant, as it first put forth a debunking argument like that of Joshua Green and then an evolutionary debunking argument inspired by Sheron Street that specifically argues against moral objectivism.

I think that Guy Kahane is confused on this point. I hold that evolutionary debunking arguments can debunk certain constructivist beliefs. Kahane writes:

> If there is no attitude-independent truth for our attitudes to track, how could it make sense to worry whether these attitudes have their distal origins in a truth-tracking process? (Kahane 2011:112)

I think the best answer to this is the one given by Richard Joyce (2012) in "Evolution, truth-tracking, and moral skepticism". He asks us to consider the case of money. We, hopefully, all agree on the constructivist status of monetary value. A given piece of paper is worth $5 because, and only because, one knows that we all collectively treat it as having the worth $5. The value of money is not a mind-independent matter.

Consider the case of Fred. Fred is a newcomer to our country and he is "unsure about the respective values of the various pieces of metal and paper that we use as money; but he is also an idiot and decides to form his beliefs on the matter on the basis of consulting tea leaves" (Joyce 2012:7). Even if he by the method of tasseography accidentally manages to form a correct belief, the belief would not be justified. One could apply a debunking argument to Fred's belief. One could undermine the belief by pointing out that the process of belief-formation is not tracking the truth.

Contrary to what Kahane claims, subjectivist and constructivist meta-ethical views may also be subject to evolutionary debunking arguments. Because at least some subjectivist and constructivist accounts of moral beliefs takes the beliefs to track the truth and thus beliefs about such truths can be produced by processes that fail to track them. This can be the case as long as moral truth is not seen as determent by one's own personal inclinations.

3.3.3 Objection tree

In the article "You just believe that because…" Roger White comes up with a thought experiment that tries to show that the selection for a belief cannot undermine a belief. He calls the thought experiment "Adams party".

> Adams party: Adam throws a party and we`re all invited. As we arrive Adam asks each of us whether p. You answer that p and go in to enjoy the party. We discover later the he had a gun in his pocket and was prepared to shoot anyone that didn't believe that p. (White 2010:586)

Roger White claims that this particularly absurd selection for a belief explains why there are only p believers at the party, but that it does not explain the fact that you had the belief in the first place. So he thinks that the thought that "I really only believe p because selective pressures are at work", is misguided. This objection has an air of trickery about it. The problem with this objection is that it is far from analogues with the case of evolutionary

selection for moral intuitions or "beliefs". This is the problem generally with this type of objections by analogy, that they often exclude central features of what they claim to be analogues to. In the case of the party, it is assumed that people already hold the belief p or –p because of independent reasons. Since the central moral intuitions and "beliefs" that we are discussing are found in other primates, it is implausible that they are constituted by independent reasons because a prerequisite for holding independent reasons is a language capacity not found in other primates. What is selected for is a set of behavioral responses probably constituted by an intuitive-affective system (Flack and de Waal 2005:6).

These moral intuitions are formed to a large extent by an evolutionary selection process that is not truth sensitive. In the case of Adams party nothing is said about the belief formation process of the p- believers. The problematic kind of causal influence on belief formation is the ones that operate independently of the truth or fact of the matter. The problematic fact that is revealed to us through the development of the evolutionary science is that our moral intuitions are insensitive to anything like moral truths.

3.3.4 Concluding Part One

I think, as Sharon Street, that had the content of our basic evaluative tendencies been very different, then the general content of our full-fledged evaluative judgments would also have been very different, and in loosely corresponding ways. (Street 2006:120) This is not to claim that our reasoning about morals purely consists of rationalizing our moral intuitions. If I believed our moral judgments to be completely unaffected by reason then I would not write about ethics.

Although exaggerated, there may be something to the fear expressed in "The Abolition of Man" by C. S. Lewis (1943), because the development of descriptive explanations from the evolutionary and neuro-scientific disciplines of our moral intuition seems to cast doubt on them as justifications for moral beliefs. The development of descriptive explanations of our moral intuitions does undermine their presumed self-evidence. We cannot appeal to our intuitive sense of right or wrong as justification for our moral believes without further ado. This poses serious limitations on what a moral argument can look like and to the kind of ethics one can formulate. It raises the suspicion that most of our moral beliefs are lacking in justification. It poses a challenge to ethics in general and to moral realism in particular. But, it

does not render all moral realists positions untenable and by narrowing the field of plausible moral realist theories is may lead us closer to formulating the correct one.

4 Normative qualia as moral facts

Part Two

In this chapter I will introduce the concept of normative facts. Firstly I will give some comment on how I believe this concept may help us overcome the challenges to moral realism raised in the previous part of the thesis. Then I will turn to the task of explicating the concept.

4.1 Facing the challenges raised in the first part of the thesis

We can classify the two main challenges raised in the previous part of the thesis as the threat of moral nihilism and moral skepticism. By moral nihilism I mean the possibility that morality, moral truth, right and wrong, really do not exist. By moral skepticism I mean the problems we have in accounting for how we can have knowledge of what is right and wrong. A particular concern is whether we have any reason to trust our moral intuitions.

To begin to be able to address these challenges we need an account of how moral value is part of the natural world. I believe that the concept of normative qualia gives us what we need to give such an account. The term "normative qualia" was first used be Sharon Hewitt (2008). My thoughts on normative qualia are deeply indebted to Hewitt's view on normative qualia. But, they also diverge, and the view presented here should not be conflated with that of Hewitt's view. The basic line of thought that underlies the introduction of a concept of normative qualia is best express by Hewitt herself:

> Human beings (are) objective parts of the universe, but so are their mental lives. If value is part of the fabric of the universe, it may not reveal itself to us through our eyes or ears, or through the results of elaborate physical experiments interpreted with the help of lengthy equations and supercomputers. Rather, value may reveal itself directly, through the nature of our mentality. It may be that value is less like the charge or spin of an electron and more like the quality of redness: not the redness that is constituted by certain reflective properties of a surface, but the redness that characterizes certain phenomenal experience. It may be that value is a phenomenal property, albeit a very special one, with particularly important ramifications. If realism is to explain how we come to have a concept of value and how we apply it at all accurately, it must explain how value exists in such a way that it is judgment-independent and

> yet also closely related to the human mind. This can be done if value is actually a phenomenal property: a quale. (Hewitt 2008:101-102)

It is this line of reasoning that leads me to introduce the concept of normative qualia. I define normative qualia as qualia that have an intrinsic value in virtue of how they are experienced. I take these normative qualia to be moral facts.

4.1.1 What are normative qualia?

I will now turn to the task of explicating the concept of normative qualia. This task requires the examination of three related concepts. These concepts are; qualia, intrinsic value and moral facts. I will address them in this order.

Although it does not actually mention the word "qualia", Thomas Nagel's (1974) paper "What is it like to be a bat?" is often cited as central in the current debates over qualia.[5] According to Nagel; if I am conscious, then there is something that it is like to be me. Consciousness has a subjective quality. All experiences have a what-it-is-like-for-me. They all have a particular phenomenological feel. The term "qualia", or in singular form "quale", is regularly used to refer to the subjective quality of experience. Examples of qualia include the pain of a headache, the taste of sugar or the perceived greenness of an ocean. We can define a quale as the what-it-is-like-for-me of any particular experience.

To illustrate; imagine that you are in an arts- and craft store sorting through pieces of colored paper. Consider your visual experience as you stare at a bright pink piece of paper. There is something it is like for you subjectively to undergo that experience. What it is like to undergo the experience is very different from what it is like for you to experience a dull gray piece of paper. This difference is a difference in 'phenomenal character'. A quale is this phenomenal character of an experience; it is what it is like to undergo the experience.

4.1.2 What is intrinsic value?

What does it mean to say that a quale has intrinsic value? What is intrinsic value?" Aristotle argued that when seeking the good we must at some point find something that is not just good for something else but which is good in itself. (See: Aristotle 2009) There must be something that "just is" good in its own right, something whose goodness is the source of, and

[5] The term "Qualia" was introduced by C.I. Lewis (1929) in a discussion of the sense-datum theory. As Lewis used the term, qualia were properties of sense-data themselves.

thus explains, the goodness to be found in all the other things. It is at this point that you will have arrived at intrinsic goodness.

The intrinsic value of something is said to be the value that that thing has "as such," or "for its own sake," or "in itself," or "in its own right." That which is intrinsically valuable has priority over that which is extrinsically valuable, as the latter is derivative of the former and is to be explained in terms of the former. That which is intrinsically valuable is often understood as giving one a reason to pursue it. The view of normative qualia that I will develop in this thesis entails that there exist both intrinsically negative and positive values. I will argue that there exist a positive normative quale that is a reason to pursue it and a negative normative quale that is a reason to avoid it.

One of the ongoing controversies in meta-ethics is the debate between exponents of internalism and externalism regarding the role of motivation.[6] This controversy is usually articulated as regarding the role of motivation in moral-judgment. But, the same issue arises in regards to one's conception of intrinsic value. Internalism about intrinsic value can be broken down into the claims that;

1) If X has intrinsic value, then ceteris paribus one has a reason to pursue or avoid X

2) If one has a reason to pursue or avoid X, then ceteris paribus one will be motivated to pursue or avoid X.

Together these to conditions constitute the claim that;

> If X is intrinsically valuable then ceteris paribus one will be motivated to pursue or avoid X

Externalists about intrinsic value deny 2). They hold that there is no necessary link between that which is intrinsically valuable and that which is motivating.

The idea of normative qualia may be compatible with both internalism and externalism about intrinsic value. I hold the view that when normative qualia are directly experienced then internalism about intrinsic value is descriptively accurate. But, when one has only indirect knowledge of normative qualia then externalism about intrinsic value holds. This view amounts to the claim that: when you are in pain then you have a necessarily motivating reason

[6] For an overview of this controversy, see: 1.8, 2.4, 3.3, 8.8 and 9.9 of Alexander Millers (2013).

to avoid the pain. When you know someone else is in pain then you have a reason to alleviate it but, this reason is not necessarily motivating.

4.1.3 What are moral facts?

In this section I will clarify my understanding of moral facts. I going to argue that there is nothing suspect about the concept of a moral fact. I will also sketch how a normative quale can be a moral fact.

The concept of a fact, like most other central concepts in philosophy, is a topic of debate and controversy. But, there are some platitudes that are generally accepted. Facts are understood to be in some way related to reality. Facts are often understood as states of affairs. Furthermore facts are always thought of as playing some role in determining truth. It is generally agreed among philosophers that propositions that conform to the facts are true, although there is disagreement about what exactly this means.

The main reason for the introduction of a concept of moral facts in ethical theory has been to account for the truth of moral statements. The aim of this is to be able to account for the truth of propositions about moral and descriptive issues as a matter of correspondence to facts. This way of understanding facts entails a correspondence theory of truth. That is a view that sees the truth or falsity of a proposition as determent by the correspondence or dis-correspondence between the proposition and the relevant matters of fact. I hold that a proposition is made true or false by its relation to the relevant facts. By 'proposition', I mean any truth-bearer. I will remain neutral as to whether truth-bearers are sentences, statements, beliefs or abstract objects expressed by sentences. I take facts to be coarse-grained.

There is one striking difference between propositions about descriptive matters and propositions about moral matters, which is that the first is about how things are and the latter about how things should be. Some may argue that this difference makes the idea of moral facts suspect. But, I do not believe that it does. If one argues that moral facts don't exist on this ground, than one would also have to deny the existence of normative facts.[7] I take normative facts to be what accounts for the truth of propositions about normative matters. An example of a normative fact may be your desire for a glass of water, as it is the fact that you

[7] For an argument to this effect, see: Bedke (2010).

want a glass of water that makes it, all else being equal, true that you should get a glass of water. Another example of a normative fact would be the rules of poker, as it is the rules of poker that makes it, all else being equal, true that you won or lost the game. I take having to deny the existence of normative facts to be a high price to pay for denying the existence of moral facts.[8]

One may still wonder how the existence of a fact can account for the truth about how something should be. How can a proposition about how things should be correspond to a fact when that which should be does not obtain? I believe the answer to this question is that the normative facts that do obtain somehow favor that which should obtain. This is to say, that you're obtaining desire for a glass of water favors getting a glass of water thus making it, all else being equal, true that you should get a glass of water. I believe moral facts function in an analogous way, the crucial difference being that moral facts are judgment-independent.

For example, the painful experience had by a victim of torture is such that it favors an end to the torture thus making it, all else being equal, true that you should stop the torture. The details of this view and why I believe it to be true, will hopefully become clear throughout this part of the thesis.

[8] Special thanks to Conrad Bakk for providing me with literature and insightful comments about this topic.

5 Pleasurableness as a positive normative quale

The two candidates for normative qualia that I have put forth are painfulness and pleasurableness. The concept of positive normative quale entails a certain view on pleasure. In this section I will spell out and argue for this view on pleasure. I will argue for this view on pleasure by arguing against the motivational theory of pleasure which I take to be the most prominent competing view of pleasure. I will also present some empirical research on pleasure and argue that this research weighs against the motivational theory of pleasure and in favor of a phenomenalist view on pleasure.

5.1 Pleasurableness as a normative quale

In this section I will clarify what it means to say that pleasurableness is a normative quale. To view pleasurableness as a positive normative quale is to understand it as a phenomenological phenomenon that has intrinsic value by virtue of the way it feels. This view entails two claims, A and B.

A: there is a phenomenological element, a quale, common to pleasure.

I hold that the phenomena rightly termed pleasures share one particular phenomenal quality. The view that pleasure is a mental state or property that is or that has a certain something that is 'what it is like' for its subject. A certain feel, feeling, felt character, tone or phenomenology, is called phenomenalism about pleasure. It is this phenomenological element, this quale, that I term pleasurableness. I do this to distinguish it from any other sensorial or cognitive element that may be a part of pleasures.

B: that pleasurableness is intrinsically valuable.

My argument for B will rely on an appeal to introspection. I hold that the value of pleasurableness is revealed through experience of it. One cannot experience pleasurableness as anything other than good. I take the value of pleasurableness to be self-evident in this sense.

5.2 Introducing the motivational theory of pleasure

The most prominent view that denies that pleasure has some shared phenomenal quality is the motivational theory of pleasure. In this section I will present the motivational theory of pleasure and explore the perceived problem that motivates it.

The motivational theory of pleasure holds that what makes something pleasurable is that we desire it. There are now several versions of this theory. The first to develop such a view was Henry Sidgwick (1907). Sidgwick's development of the first proto-motivational theory of pleasure was motivated by him not being able to identify any common phenomenal feature that all pleasures share. In the Method of Ethics he writes;

> when I reflect on the nature of pleasure - using the term in the comprehensive sense which I have adopted [...] - the only common quality that I can find in the feelings so designated seems to be that relation to desire and volition expressed by the general term "desirable" [...] I propose to therefore define Pleasure [...] as a feeling which, when experienced by intelligent beings, is at least implicitly apprehended as desirable or- in cases of comparison - preferable. (Sidgwick 1907:127)

This difficulty in singling out a specific qualitative feel of pleasurableness is known as the heterogeneity problem. As he is not able to identify a single common phenomenal feature that all pleasures share Sidgwick instead suggest that we understand pleasure "as a feeling which, when experienced by intelligent beings, is implicitly apprehended as desirable." (Sidgwick 1907:127) This qualification allows for the possibility that this does not need to be the case in certain pathological cases or with animals.

As Sedgwick was aware of, this view is susceptible to an obvious objection. It may be objected that we desire something that turns out to be far from pleasurable.

> It may turn out a 'Dead Sea apple', mere dust and ashes in the eating: more often, fruition will partly correspond to expectation, but may still fall short of it in a marked degree[9] (Sidgwick 1907:101)

You may really desire a piece of pie, but when you get the piece, eating it gives you no pleasure. Explaining how this can be the case if pleasure is nothing more than a desire is something a plausible motivational theory of pleasure must be able to do.

[9] Dead Sea apple, or apple of Sodom, often used figuratively to describe something that looks desirable but which is worthless.

Chris Heathwood articulates a more refined and contemporary version of motivational theory that seems able to do this. His formulation of the motivational theory goes as follows:

> A sensation S, occurring at time t, is a sensory pleasure at t if the subject of S desires, intrinsically and de re, at t, of S that it be occurring at t. (Heathwood 2007:32)

From this formulation it follows that that a sensory experience is a pleasure if and only if it is contemporaneously desired for its own sake. Heatwood`s formulation solves many of the problems that other desire-based theories of pleasure face. Like that of explaining disappointment. For although we might have desired something a great deal, if we did not take pleasure in its experience this indicates that we did not desire it much while it was occurring. It can also explain how we can find surprising experiences pleasurable, as we do not need to have formed a pre-existing desire for something for it to be pleasant.

5.2.1 Painful art as a problem for the motivational theory of pleasure

Aron Smut (2011) has pointed out that this refined formulation also has its problems. For it seems perfectly plausible that one might contemporaneously desire some non-pleasure for its own sake. Smut argues that this in fact often is the case with what he calls painful art. Smut asks us to consider the third episode of Ingmar Bergman`s horribly depressing six hour series *Scenes for a marriage.* In the episode there is an excruciating half hour of conversation where the two main characters face up to the problems of their marriage, where the husband Johan proceeds to show his wife Arianne, a wallet picture of his lover. It is a seen only a sadist could enjoy, but still it is truly great cinema. Smut writes;

> I would not describe my experience of this episode as in any way pleasurable, but I find it to be one of the most effective affair fictions ever created. Indeed, pardon my gushing, it contains some of the most powerful moments in cinematic history. I would recommend it to others, largely for the experience. But it is not pleasurable. No, it is nothing less than emotionally devastating. (Smuts: 2011:247)

If we can, as Smut report that he does, contemporaneously desire to see the episode for its own sake even though this experience is not a pleasant one, then pleasure and contemporaneous desire cannot be the same thing.

5.2.2 Epiphenomenalism and the Euthyphro problem

Motivational theories reduce pleasure to a special type of desire, as there is nothing more to being a pleasure than to being desired in the right way. Motivational theories thereby effectively render pleasures epiphenomenal, as pleasures cannot function in any informative motivational explanation. It renders pleasures epiphenomenal and can therefore not allow for pleasures having any type of motivational pull. This is an odd consequence and one that does not sit well with the idea of pleasure as a normative quale.

Smuts terms the debate over the relation between pleasure and desire the "Euthyphro problem". (Smuts: 2011:249) Socrates questioned Euthyphro about what came first, the righteousness of pious acts or the divine love of them. (Plato 2008) When dealing with pleasure we face a similar problem. We must be able to answer the question what comes first, the pleasurable feel of pleasures or our desire for them? I would suggest that the motivational theory goes astray by getting the explanation backward. The reason I desire a back rub is that it is pleasurable; it is not pleasurable because I desire it. Pleasure is not that which we contemporaneously desire. Rather we contemporaneously desire pleasures because they feel good.

5.3 All pleasures feel good

Smut has suggested a rather straightforward answer to the Heterogeneity problem. He argues that we can identify one phenomenal quality that is common to all pleasures and distinctive to pleasures, namely that they feel good. The pleasures we get from sex, reading a good book or eating chicken are very different, but they all share this quality, they all feel good. It is this "feels good quality" that I take to be inherently normative. It is this "feels good quality" that is a reason to pursue pleasurable experiences. This view of pleasure has the merit of capturing the common sense understanding of pleasure in a way that the motivational theory does not. We would not in common speech call an experience that did not feel good a pleasure, barring the common practice of insincerity and lying? This view also has the merit of being on the right side of the Euthyphro problem. This view can explain why pleasures are contemporaneously desired and can do so in a way that does not confuse the cause with the effect.

5.4 The difference between wanting and liking

In this section I will argue that our current scientific understanding of pleasure sits well with the "feels good theory"[10] as it shows us how pleasures can vary greatly but still have some common component. On the other hand it creates problems for the motivational theory of pleasure, as it lessens the heterogeneity problem, thereby removing some of the original motivation for the theory.

The theory is also made less appealing as the science separates the wanting from the liking in a way that does not sit well with the motivational theory of pleasure. James Olds and Peter Milner (1954) carried out experiments where they discovered that rats would repeatedly press levers to receive tiny jolts of current injected through electrodes implanted deep within their brains. Initially it was hypothesized that they had discovered the pleasure center of the brain. In a series of ethically questionable experiments similar behavior were found in humans.

> Although the researchers also found compulsive lever pressing in some patients, it was never - clear from these patients' subjective reports that the electrodes did indeed cause real pleasure." Researchers like Green and Smith have argued that the electrodes never actually cause any pleasurable experience, no `liking`, but only a wanting, a desire or motivational pull to obtain the stimulation. (Kringelbach and Berridge 2010)

One thing the science pleasure teaches us is that the simple term "pleasure" masks a complex phenomenon.

> Pleasure is a complex psychological concept with many different sub-components which include 'liking,' 'wanting,' and 'learning' components (Kringelbach and Berridge 2010) [11]

That the science makes a distinction between wanting and liking makes Smuts argument from painful art seem more plausible. There may be situations, like in the case of painful art, where one really can desire something without liking it. That the science distinguishes these different elements of pleasures should also make us question whether it is fruitful for philosophers to try to explain liking in terms of wanting, like the motivational theory of pleasure tries to do.

[10] Special thanks to Dan Weijers of Victoria University, Wellington, for pointing me in the direction of this research.
[11] See also Kringelbach and Berridge (2008)

It may in addition show us how pleasures that involve different sensorial and cognitive abilities still can share some common phenomenal features, as they draw on the same brain systems.

> The available evidence suggests that brain mechanisms involved in fundamental pleasures (food and sexual pleasures) overlap with those for higher-order pleasures (for example, monetary, artistic, musical, altruistic, and transcendent pleasures) (Kringelbach and Berridge 2010).

It seems likely that all pleasures, from sensory pleasures, drug use and aesthetic delights all involve the same fundamental hedonic brain systems. The fact that it is the same system that is involved in all pleasures makes it possible to explain how they all can share a common phenomenal quality even though they involve different sensorial and cognitive abilities. Granted the underlying assumption that what goes on in our brains constitute our phenomenal experience, pleasure is never merely a sensation or a thought, but is instead an additional hedonic gloss generated by the brain via dedicated systems. (See: Frijda, 2010, Aldridge and Berridge 2009)

The idea of a hedonic gloss that comes in addition to the sensory and cognitive elements of a pleasure sits perfectly with the "feels good theory" of pleasures. The idea of a special brain system that produces a hedonic gloss in addition to the cognitive and sensory element of a pleasure makes us able to see how it could be that the sensation of pleasures differs greatly while there still is a hedonic element that is constant across all pleasures.

I will be as bold as to claim that the heterogeneity problem that troubled Sedgwick is, more or less, solved by modern neuroscience. For the science tells us that;

> The rewarding properties of all pleasures are likely to be generated by hedonic brain circuits that are distinct from the mediation of other features of the same events (e.g., sensory, cognitive) (Kringelbach and Berridge 2010. See also Kringelbach 2005)

Although one can only speculate about such matters, I do suspect that Sedgwick would not find the heterogeneity of pleasures as troubling as he did if he had had the conceptual tools and scientific insight we now have.

5.5 Different phenomenalism about pleasure.

Now there are at least two different types of theories of pleasure that hold that pleasures share a common phenomenal quality. There are the types of views that hold that pleasurableness is

a distinctive phenomenal quality, like Aron Smuts feels good theory professes. There are also some views that see pleasurableness as a dimension. Shelly Kagan has argued for seeing pleasures not as a mental state or a distinct phenomenal quality but rather as a "dimension along which experiences can vary." (Kagan 1992:172) Kagan proposes that pleasure can be understood by an analogy with volume. Just as the volume of a sound is not a distinct part of the soundscape but rather a dimension on which it can vary. Likewise, the pleasurableness of an experience may not be a distinct quality, but a dimension on which different experiences can vary. I do not want to connect the claim that pleasurableness is a positive normative quale closer than necessary to any particular interpretation of pleasure. Both views are fully compatible with the idea that pleasure is a positive normative quale.

5.6 The intrinsic value of pleasurableness

In this section I will offer some considerations in favor of the view that pleasurable experiences are intrinsically valuable. These considerations rely crucially on an appeal to introspection. I will then address the objection that pleasures can't be intrinsically valuable as one can take value in things that are on the whole morally objectionable. I will attempt to offset this objection by specifying the view I am proposing.

If the goodness of pleasurable experiences is to be found in a special quale of pleasurableness, then the goodness of pleasures would be directly knowable by us only through experience of it. My main argument for the intrinsic value of pleasurableness therefore takes the form of an appeal to the reader to examine his or her own experience.

Is not the very feel of pleasure reason enough to pursue it? Be it the pleasure derived from good morning coffee, an orgasm, exercise or whatever floats your boat. Is not the `feels-good` quality of pleasures something that we just find inherently valuable? I believe that it is and I suspect that most will come to this conclusion if they carefully examine their pleasurable experiences. I believe that the intrinsic value of pleasurableness is revealed to us through experience of it, in the sense that one cannot experience pleasurableness as anything other than good. I take the value of pleasurableness to be self-evident in this sense.

It is worth noting that I am in no way suggesting that our normative phenomenology gets its goodness or badness from standing in some relation to a further realm of normativity, neither am I suggesting that these phenomena represent good or bad entities that exist

independently of us. I rather believe that we in pleasurable experiences have value as part of the experience.

That pleasure is inherently valuable is in no way a new view. One can find this view expressed in Plato, in his dialogue Protagoras. In the dialogue Plato argues, through the character of Socrates, that people who condemn pleasure do so not because they take pleasure to be bad in itself. Rather they do so because of the bad consequences they find pleasure often to have. Plato, through the character of Socrates, therefore concludes that pleasure is good, in itself, and pain bad, in itself. (Plato 1956:40)

The view that pleasures has, in some sense, intrinsic value has been held by many different thinkers. The view was perhaps most prominently represented by hedonism in the ancient Greco-Roman world and by utilitarianism in the modern one. There seems to be something about the feel of pleasures that have convinced many people of their intrinsic value. This is what one should expect if one believes that the intrinsic value of pleasures is revealed to us by experience of them. Had the view been new it would have been a serious objection against believing that the intrinsic value of pleasures is self-evident.

5.6.1 Objection to the goodness of pleasure

One may object to the view that pleasurable experiences are inherently valuable because one believes that many of the things we take pleasure in are morally objectionable. Some of the experiences that normally have a good or bad value are intentional mental states, like being proud or ashamed about something. I do not take these states as signaling the objective badness or goodness of what they are about. This is not the view I am proposing so these cases may therefore be confusing.

Schadenfreude may, for example, be a case of a pleasure which one hesitates to accept as intrinsically valuable. It is therefore important to be precise. I hold that the only thing that is intrinsically valuable in schadenfreude is the quale of pleasurableness, not the misfortune one takes pleasure in.

6 Painfulness as a negative normative quale

In this chapter I will argue that normal pain experiences include a negative normative quale. For this to be the case there has to exist a quale common to all the experiences we rightfully call pain. In addition this quale has to have an intrinsic negative value. I will argue these points in turn.

6.1 The quale of painfulness

In this section I will argue that there exists a quale of painfulness common to all pains. To begin with I will attempt to point out the particular phenomenological element that I am calling painfulness. I will argue that the same quale of painfulness can be found in social and physical pain. After this I will address the arguments given by Austin Clark (2005) in his article "*Painfulness is not a quale"*.

Pain and color-perception are often given as paradigm examples of qualia. I will term the common phenomenal quality that I believe pains share, "painfulness". I do this to distinguish it from any other sensory or cognitive element that may be a part of a pain. If one is uncertain about what phenomenon I mean to designate by the term painfulness one may imagine holding one's hand over a candle. If one holds one's hand over a candle, one will feel a heat sensation; one will feel that this sensation is located in one's hand. This experience will after a few seconds be accompanied by an undesirable quality, it will have a bad feel, it will hurt. It is this aversive quality, this bad feel, that I am calling painfulness.

I hold that there is a distinction between the sensory and the affective or painful element of normal pain experience. This is a distinction common to the science on the issue. (E.g. Price, Harkins and Baker 1987) With the term "painfulness" I mean to designate the affective not the sensory element of the pain.

There seems to be to distinct categories of experiences that we talk of as painful. One is social events, like a break up. The other is physical events, like breaking one's leg. I hold that the quale of painfulness accompanies both types of pain. I will give two arguments for this. First I will argue that introspection supports the view that social pain and physical pain

share a common bad-quality. Secondly, I will put forth research which indicates that the production of social and physical pain involves the same underlying pain-system.

There are many things that we in everyday speech talk of as painful. Like stepping on a nail or being ostracized. I believe that this common way of talking gets something right. Stepping on a nail and being ostracized certainly feels very different. But, I believe that they also have something in common as both feel bad. I hold that all pains shares a feels-bad quality. Would you really call something painful that did not feel bad?

There is linguistic evidence that may be taken as supporting this introspective claim. The uses of words such as "painful" to describe experiences of social pain are in no way unique to English. The uses of terms for physical pain about social pains are to be found in many languages. (MacDonald and Leary 2005:173) This may suggest that social and physical pains share a common feel.

More tangible evidence for social and physical pains sharing the same painful quality may be found in the neurological literature on social pain. The following arguments are based on one crucial assumption. I assume that what goes on in our brains is constitutive of, or at least deeply influence, what we experience. It is this assumption that leads me to read the neurology of social pain as supporting the view that there is a common bad-quality to both social and physical pain.

There has consistently been found activation in regions associated with the affective element of physical pain in instances of social pain. Research with both animal and human subjects has indicated that physical and social pain processes overlap, specifically in two regions of the brain; the dorsal anterior cingulate cortex, dACC, and to a lesser extent the anterior insula. These areas seem to contribute both to the painfulness of physical pain and separation distress in nonhuman mammals. (Eisenberger 2010:173)

This neurological evidence is further supported by behavior consistencies. As one might expect the overlap in neuronal activity correlates with an overlap in certain behaviors. Like distress vocalizations and increased aggression. (Hadland et al 2003, MacLean and Newman 1988 and Robinson 1967)

Social rejection has been shown to activate parts of the brain associated with the affective element of physical pain. This suggests that individuals may be describing experiences of social pain, like rejection, as being "painful" because they rely, in part, on pain-related neural circuitry. Moreover, subjects who reported feeling greater social distress in

response to the exclusion also showed greater activity in the dACC. (Foltz and White 1962) Similar findings have been reported in the case of bereavement.

In one study female subjects were shown pictures of recently deceased mothers or sisters. Their reaction was compared with responses to being shown a picture of a female stranger. When seeing the lost loved one the subjects showed increased activity in the dACC and anterior insula. (Gündel 2003) Moreover, females who lost an unborn child after induced termination, compared with those who delivered a healthy child, showed greater activity in the dACC in response to viewing pictures of smiling babies. (Kersting, et al 2009)

Similar activation patterns have been documented in cases of social distress. Various kinds of socially painful experiences, form rejection to bereavement seem, to rely in part on neural regions that play a direct role in the affective part of physical pain.

I take this as supporting the introspective evidence that there is a common feels-bad quality to all pains, social and physical. Having made a rough case for there being a common quale of painfulness, we may proceed to examine why some philosophers believe that painfulness is not a quale.

6.1.1 Addressing the arguments in painfulness is not a quale

Clark is a proponent of a motivational theory of pain. He believes that painfulness should be understood as some "relation to desire or volition". (Clark 2005) Clark gives two main arguments for believing that painfulness is not a quale. The first argument that I will address is a version of the heterogeneity argument. The second argument is based on the premise that qualia cannot be motivating.

Clark argues that one episode can hurt as much as another, be equally awful, even though their sensory character differs. He asks us to consider a range of painful experiences, like being sunburnt or tearing a muscle. The pain of being sunburnt and the pain of tearing a muscle seem to share no common sensory quality. So how can painfulness be a quale when two experiences can be equally painful and still feel so very different?[12] I believe that this argument rests on a mistake. The mistake is to assume that the phenomenological elements of a pain are exhausted by its sensory qualities. That there is heterogeneity in the sensory elements across different pains does not mean that they do not share some other felt quality. I

[12] Clark acknowledges that this argument is analogues to the one given be Sidgwick about pleasure. See: 5.2

believe that Clark himself comes close to pointing out the non-sensory phenomenal quality that all pains share, when he writes:

> For my part, when I reflect on these episodes of pain, the only common quality I can find in the feelings so designated seems to be that expressed by the general term "bad" or "aversive".(Clark 2005)

Pointing out that all episodes of pain share a felt bad or aversive quality is analogues to what Smut does when he argues for the feels-good theory of pleasure. I will therefore propose a feels-bad theory of pain, which holds that there is a common phenomenal element, a feels-bad quality, which all pains share. Clark sees that there is a bad feel common to all pains, so why does he then believe that painfulness is not a quale? The answer to this question is fund in his view of qualia. Clark stipulates two criteria for something being qualia;

1 Qualia are properties that are (somehow) instantiated in various sensory episodes

2 That in virtue of which two sensory episodes instantiate the same particular quale cannot be defined in any functional or behavioral terms. (Clark 2005)

That painfulness qualifies to the first criteria is uncontroversial. Clark's main argument against viewing painfulness as a quale hinges entirely on the second criteria and it is with this premise that I take objection. Clark takes the second premise to mean that "qualia are distinct from any functional properties or behavioral dispositions". This entails that the experience of a quale cannot be motivating, as motivation is a "behavioral disposition". (Clark 2005) Having established this definition he goes on to argue that painful experiences are aversive and therefore a motivation rather than a quale.

Had Clarks argument been directly aimed at the conception of normative qualia as presented in this thesis, then it would simply have been question begging as the conception of normative qualia that I am proposing holds that experiencing a normative quale is inherently motivating. (See: 4.1.2)

The way the second criterion is understood effectively renders qualia epiphenomenal by definition. I believe that there are good reasons to believe that qualia are not epiphenomenal and in Chapter Four I will give two arguments to this effect. The second of these arguments is also an argument for believing that the quale of painfulness is motivating.

6.2 The intrinsically badness of painfulness

I will now turn to argue that the quale of painfulness is intrinsically bad. I will first make an appeal to introspection. I will then go on to present and argue against two arguments for not viewing painful experiences as intrinsically bad. The first argument is by Christine Korsgaard, the second by Sharon Street.

I believe that the weightiest argument that can be given for the view that painful experiences have an intrinsically negative value is simply to appeal to introspection. Painful experiences like breaking a leg or losing a loved one, just feels bad. Is not the experience of this "feels bad quality" in itself a reason to avoid it? I believe it is, and I suspect that most will come to the same conclusion if they, free form prejudice, examine their experience of pain. If you hesitate to accept this, then I suggest that the next time you have the misfortune of a painful experience, that you examine the experience and ask yourself if not the very feel of the experience is a reason to avoid it?

I believe that there is a quale of painfulness and that this quale cannot be experienced as anything other than bad. I will expand on this point in section 6.2.4. I believe that the badness of painful experiences is self-evident, in the sense that anyone who is experiencing painfulness knows a reason to avoid it. I will now turn to examining two of the reasons why some philosophers disagree with this view. .

6.2.1 Korsgaards argument against the intrinsic badness of pain

Korsgaard is one of the philosophers who argue that painful experiences aren't intrinsically bad. Korsgaard writes that:

> Someone who says he is in pain is not describing a condition that gives him a reason to change his condition. He is announcing that he has a very strong impulse to change his condition. (…) the painfulness of pain consists in the fact that these are sensations that we are inclined to fight … pain is not the condition that is a reason to change your condition… it is our perception that we have a reason to change your condition. Pain is not a reason at all. (Korsgaard 1994:146)

We may be constituted in such a way that we want to avoid pain. Avoid it both for ourselves and for those we care for. But, she argues that this does not entail that there is anything intrinsically bad in or about painful experience. Korsgaard rather believes that dislike of painful experiences and our inclination to avoid them is a matter of judgment. Korsgaard

understands Painfulness as a judgment about a sensation. One may find this a plausible view for is it not true that;

> Pain really is less horrible if you can curb your inclination to fight it. This is why it helps, in dealing with pain, to take a tranquilizer or to lie down. Ask yourself how; if the painfulness of pain rested just in the character of the sensations, it could help to lie down? The sensations do not change. Pain wouldn't hurt if you could just relax and enjoy it (Korsgaard 1994:147)

Hewitt (2008:111) has argued that the type of argument that Korsgaard gives rely on a fairly simple, but faulty, strategy. The mistake is to assume that the phenomenological elements of pain are exhausted by its sensory qualities. It is true that the painfulness of pain cannot rest just in the character of the sensations. But, that there are some felt parts of pain that are not experienced as intrinsically bad does not mean that no felt part of normal pain experiences are intrinsically bad. The felt parts of pain that include no negative experience are obviously not intrinsically bad.

Taking a tranquilizer to alleviate pain may leave the sensory element of the pain the same, but it has an effect on one's phenomenology. There is at least one change in our experience of the pain, namely that it feels less bad. It is this feels-bad quality that I believe is inherently bad. That the sensory element of a pain may persist even though the painfulness dissipates does in no way prove that painfulness is not inherently bad. I believe that this becomes apparent when one gets clear on what actually happens in such cases. Pain is normally a complex experience made up of at least two components. There is the sensation of nociception. This sensation can vary greatly depending on the stimulus that causes the pain. A needle causes a stinging sensation; a burn causes a burning sensation, etc. A pain may be dull, sharp, constant or pulsing. The nociceptive element of the pain also includes its location as pain may be located in different parts of one's felt body. In addition to the nociception there is also an affective element. This is the painfulness or feels-bad quality of the pain. It is this affective element that I understand as a negative normative quale.

Under the influence of opiate painkillers, the drug users normally experience a dissipation of the felt badness while the nociceptive sensation stays. The users of these opiates relate that it does not eliminate all sensation of pain as much as it makes them no longer troubled by the pain. It takes away the painfulness of the pain. This phenomenon is called "reactive disassociation" and it is a well-documented phenomenon. It may also occur with certain types of brain damage, such as prefrontal lobotomies and lesions of the anterior cingulate cortex. (Freeman and Watts 1950, 1942, 1946)

That the nociceptive element of pain may persist while the painfulness of the pain dissipates tells us nothing about whether the badness of pain is judgment-dependently bad or not. The real issue is what the painful element really is, is it an inherently bad phenomenal quality or a judgment about a sensation? In section 6.5 I will give an argument against viewing painfulness as a judgment about some sensation.

6.2.2 Streets argument against the intrinsic badness of pain

The second horn of Street's (2006) paper "Darwinian dilemmas for ethical realism" poses a challenge to the view that pain is inherently bad. Street believes that pains only are judgment-dependently bad. She holds that the badness of a pain is dependent on one's evaluative attitudes.

The supposed dilemma for the moral realist is that either the moral realist must say that having a negative evaluative reaction to the sensations of pain is necessary for these sensations being sensations of pain or the moral realist must say that it is not. If the moral realist claims that it is not necessary for pain to elicit a negative evaluative reaction to be a pain, then there may be some individuals that will enjoy pains, even though these are inherently bad. This view seems confused and it conflicts with the intuitions that may originally lead one to believe that pain is inherently bad. The moral realist that wants to avoid this implausible position is forced to embrace the view that having a negative evaluative reaction to the sensations of pain is necessary for these sensations being sensations of pain. But, Street argues that this answer is self-defeating. Street writes that;

> In order to selvage his or her view of pain as bad independently of our evaluative attitudes the realist must admit that pains badness depends on it being a sensation such that the creature who has it is unreflectively inclined to take it to be bad. But this, in turn is just two attitudes – in particular, one our being unreflectively inclined to take it to be bad. Pain may well be bad, in other words, but if it is so, its badness hangs crucially on our unreflective evaluative attitudes toward the sensation which pain is. (Street 2006:151)

But, this simply is not correct. The moral realist needs not admit that badness of a pain depends on one's "unreflective evaluative attitudes toward the sensation which pain is". The realist does not have to do this as pain is not a sensation. Pain is a complex phenomenon of which sensation is only one element. The moral realist need not construe the badness of pain as the product of an unreflective evaluation for pain to be inherently bad. Painfulness need not be evaluated as bad; it may simply be experienced as such.

6.2.3 Reasons for believing that the badness of pain is not a judgment

In this section I am going to offer an argument against viewing painfulness as a judgment. If painfulness is a judgment about a sensation then it follows that there can be no painfulness without a sensation.

We have already seen that painfulness and sensations can come apart, in cases of reactive dissociation. If cases can be fund where the sensorial element dissipates but the affective element persists then this would pose a serious challenge to the view that painfulness is a judgment about a sensation. And, indeed such cases have been documented by Markus Ploner (1999) and colleagues, in their paper "Pain Affect without Pain Sensation in a Patient with Postcentral Lesion". In the paper they report on the clinical examination and cutaneous laser stimulation of a 57-year-old male, who suffered from a right-sided postcentral stroke. The patient demonstrated "loss of sensory discriminative pain component and preserved motivational-affective dimension of pain."

> The patient spontaneously described a 'clearly unpleasant' intensity dependent feeling emerging from an ill-localized and extended area 'somewhere between fingertips and shoulder', that he wanted to avoid. The fully cooperative and eloquent patient was completely unable to further describe quality, localization and intensity of the perceived stimulus. Suggestions from a given word list containing 'warm', 'hot', 'cold', 'touch', 'burning', 'pinprick-like', 'slight pain', 'moderate pain' and 'intense pain' were denied nor did the patient report any kind of paraesthesias (all descriptions translated from German) (Ploner et al. 1999:213)

One may argue that even in this case the painfulness can be understood as a judgment about a sensation, as there is some vague sensory object located somewhere between the patients fingertips and shoulder." This case may not be conclusive but it surely is suggestive. There are furthermore good reasons to believe that a conclusive case may appear. Because the "clear perceptual dissociation was paralleled by an anatomical dissociation between affected lateral pain systems and spared medial pain system." The sensory and the affective element of pain are believed to be products of anatomically segregated systems.

> Cerebral structures involved in pain processing are commonly divided into a lateral and a medial pain system (Albe-Fessard et al., 1985). These two systems diverge at the thalamic level(….)These anatomically segregated systems are supposed to subserve functionally different components of pain perception. (Ploner et al. 1999:211)

There is a close association between motivational-affective aspects of pain and the medial pain system (Vogt et al., 1993; Craig et al., 1996; Rainville et al., 1997). There is also an association between the sensory-discriminative components of pain perception and the lateral pain system (Kenshalo and Willis, 1991),

In the case of the 57-year-old stroke patient most, but not all, of the sensory discrimination was lost while the affective element remained. There may be cases where all sensory-discrimination is lost but where the affective element remains. The anatomical segregation of these systems makes the possibility of such damage plausible. But, if painfulness is a judgment about a sensation then this cannot be the case, this should make us question whether this really is a tenable philosophical position.

6.2.4 Why you cannot enjoy pain

Korsgaard writes that "Pain wouldn't hurt if you could just relax and enjoy it". In this section I am going to argue that this is not the case. I believe Korsgaard vastly overestimates our ability to change how we experience pain. Has anyone ever managed to enjoy torture? Contrary to her opinion I hold that there is at least one part of normal pain experience that is inherently unenjoyable, this is the quale of painfulness. To see why I believe that painfulness is inherently unenjoyable one must get clear on the function which I believe it has. It may be instructive to consider cases of "congenital indifference to pain". This is cases where painfulness is not felt. Such cases may give us a greater understanding of the function of painfulness. Consider the case of Tanya:

> Tanya was a four year old patient with dark, flashing eyes, curly hair and an impish smile. Testing her swollen ankle, I found that the foot rotated freely, the sign of a fully dislocated ankle. I winced at the unnatural movement, but Tanya did not. ... When I unwrapped the last bandage, I found grossly infected ulcers on the soles of both feet. Ever so gently I probed the wounds, glancing at Tanya's face for some reaction. She showed none. The probe pushed easily through soft, necrotic tissue, and I could even see the white gleam of bare bone. Still no reaction from Tanya. It seems apparent that Tanya suffered from a rare genetic defect known informally as "congenital indifference to pain". (….) Seven years later I received a telephone call from Tanya's mother. ... Tanya, now eleven, was living a pathetic existence in an institution. She had lost both legs to amputation: she had refused to wear proper shoes and that, coupled with her failure to limp or shift weight when standing (because she felt no discomfort), had eventually put intolerable pressure on her joints. Tanya had also lost most of her fingers. Her elbows were constantly dislocated. She suffered the effects of chronic sepsis on her hands and amputation stumps. Her tongue was lacerated and badly scarred from her nervous habit of chewing it. (Brand and Yancey 1993:3-5)

Now imagine that you were some alien doctor with scientific understanding and technological capabilities far exceeding our own. You were assigned Tanya as your patient and told to make her evolutionarily fit. The first thing you would need to do is to somehow lower the probability of Tanya continuing to injure her body. One thing you could, and probably should do, is to design some signal-system to tell Tanya to avoid whatever is hurting her body. But, the signal generated cannot be just any signal. It has to be a signal that is near impossible to ignore. The signal must be such that it motivates avoidance, thereby reducing the damage done. In addition it must be a signal that she cannot habituate to, as it then would lose its effect, it must be a signal which she cannot learn to like because that would have truly horrific consequences.[13] I believe that the quale of painfulness has all of the characteristics that the alien doctor would want in his signal. It is hard to ignore, it seems to motivate avoidance, it seems impossible to habituate to and inherently unenjoyable. I believe the quale of painfulness to be nature's way of solving the problem facing our hypothetical alien doctor. I therefore believe that we should expect it to be inherently unenjoyable.

One may still believe that there is a category of people that actually enjoy certain painful experiences. Self-harmers, masochist or body suspension enthusiasts may all be contenders for this category. I hold that if anyone has a contemporaneously positive experience involving pain, then the painfulness of the pain still counts towards the overall contemporaneous experience being negative. I believe that there are two factors that may explain why some seem to have a contemporaneously positive experience of a situation involving a pain. This may be due to the secession of some greater pain or some pleasure gained from the experience.

Many people report that self-injury both reduces unwanted feelings and increases wanted feelings. (Klonsky 2009) Recent work on pain offset relief shows that pain itself does not make people feel better, but something about the removal of pain does. (Franklin et al 2010) "This is important because it shows that people who engage in self-injury are not "wired differently" to "enjoy pain". (Franklin 2014)

[13] Optimally this signal shouldn't just stop actions that hurt her, but get her to avoid actions that will hurt her. So the signal should be constructed to function as a negative reinforcer. The relation between learning and phenomenology is a complex issue that I cannot engage here.

7 Arguing Against epiphenomenalism and a moral truth tracking hypothesis

In this chapter I will give two arguments against the view that the qualia of pleasurableness and painfulness are epiphenomena. I will subsequently present and argue for a moral truth tracking hypothesis. [14]

The first argument argues that standard evolutionary theory should lead us to expect these qualia to have some adaptive function.

The second argument argues that the simplest way to account for the correlation between, that which is bad for you and that which feels bad to you and that which is good for you and that which feels god to you, is to ascribe causal efficacy to these phenomena. The second argument is also an argument for the view that the qualia of pleasurableness and painfulness are inherently motivating.

7.1 First argument against epiphenomenalism

This argument is a moderated version of an argument initially given by Karl Popper at the first ever Darwin Lectures. It is not a conclusive argument against epiphenomenalism. But, it shows that epiphenomenalism should not be taken as the default position. Poppers main target was the view professed by T. C. Huxley that:

> In men, as in brutes, there is no proof that any state of consciousness is the cause of change in the motion of the matter of the organism (...) We are conscious automata. (Huxley1874:243)

Contrary to this view Popper argued that the idea of epiphenomenalism sits un-well with evolutionary theory.

> Animals and men could not, therefore, be automata in Huxley's sense. If subjective experiences, conscious states, exist— and Huxley admitted their existence—we should, according to Darwinism, look out for their use, for their adaptive function. As they are useful for living, they must have consequences in the physical world. (Popper 1978:358)

I believe the general trust of this argument to be valid. The qualia of painfulness and pleasurableness have evolved; we should therefore follow the Darwinian logic and look for their adaptive function. Epiphenomenalism states that the qualia of painfulness and

[14] Special thanks to Hedda Hassel Mørch for sharing her insight on this topic with me.

pleasurableness have no causal efficacy and therefore no adaptive function. Accepting epiphenomenalism is to break with the default assumptions of evolutionary science and this should count against the view.

Popper seemed however to be of the misconception that useless traits never evolved and this led him to overstate his case. This is something that he has been rightly criticized for. (See, Jackson 1982) Useless features or "spandrels" may in fact evolve as a byproduct of the selection for some other trait. (Gould and Lewontin 1979) But, there are at least two reasons to view the quale of pleasurableness and painfulness as unlikely candidates for the category of spandrel. Painfulness and pleasurableness accompany too wide a range of physical phenomena to be the byproduct of selection for something else. If they were spandrels then how could it come to be that the same pleasurableness accompanies the eating of good food and making love? How could it come to be that the same painfulness accompanies social rejection and a stab wound?

7.2 Second argument against epiphenomenalism

If on accepts epiphenomenalism about pleasurableness and painfulness then one gets a problem explaining the correlation between that which is bad for you and that which feels bad to you and that which is good for you and that which feels god to you. That epiphenomenalism creates a problem for explaining this correlation was apparent to William James. In "Principles of psychology", James writes:

> An animal that should take pleasure in a feeling of suffocation would, if that pleasure were efficacious enough to make him immerse his head in water, enjoy a longevity of four or five minutes. But if pleasures and pains have no efficacy, most noxious acts, such as burning, might not give thrills of delight, and the most necessary ones, such as breathing, cause agony." (James 1890:146)

Yet these correlations are fairly consistent. There is a correlation between painfulness and what is detrimental to the survival and reproduction of the organism. There is also a correlation between pleasurableness and what is conducive to the survival and reproduction of the organism.

Accepting epiphenomenalism about qualia comes at the cost of not being able to explain these two correlations. Against this accusation the epiphenomenalist may object that

these correlations are overstated and that there really are some cases where these correlations do not hold.

Most of these cases are understandable if one sees that we are talking about what would have been detrimental or beneficial to the organism in the environment in which these connections evolved. The joy we get from sugary sweets may be detrimental to us in our current environment. But, it would have been beneficial to a pre-historic man getting him to seek out nutritious fruits. It may seem in some cases that there often is a disproportional intensity, an intensity of pain that does not stand in relation to how detrimental the impact is to the organism. Natural selection is far from perfect. It often results in glitches, like idiopathic pain may be. This is pain that persists after the trauma or pathology has healed or that arises without any apparent cause. (Diatchenkoa, et al. 2006) Idiopathic pain may be an exception to the idea that pain is helpful to survival. If this is the case then I would suggest that idiopathic pain is the exception that proves the rule.

Most other cases of erroneous or disproportional pain or pleasure experiences can be explained as trade-offs. All biological systems operate under cost-constraints. (Smith 1978) In addition the costs for getting a signal wrong are always measured against the cost of increased accuracy. (Godfrey-smith 1991) As the cost of getting the signal wrong in cases of what is detrimental to the organism often is much higher than a false signal, one can expect certain amounts of pain in cases that are not dangerous or very little so. Taking account of these exceptions and complications seem to do little to lessen the argument. The correlations seem generally to hold. These are natural phenomena that warrant an explanation.

7.2.1 Explaining the correlation

Hedda Hassel Mørch (2014) has shown one way that James's point may be made into a formal argument.

If painfulness in any way motivates avoidance, then any creature for which pain is correlated with neutral or beneficial stimuli will be selected against, and any creature for which pain is correlated with detrimental stimuli will be selected for.

If pleasurableness in any way motivates pursuit, then any creature for which pleasure is correlated with neutral or detrimental stimuli will be selected against and any creature that feels pleasure in correlation with beneficial stimuli will be selected for.

The argument can be put in the terms of a Bayesian inference. Bayesian inference holds that:

$$P(e \mid h) > P(e)$$

That is to say that a hypothesis h is confirmed by evidence e if probability P of the evidence is greater if the hypothesis is true than if it is not. If epiphenomenalism is true then there would be no reason to expect this correlation so we can assume that the probability of the correlation would be low.

P (correlations) = low

P (correlations | epiphenomenalism) = P(correlations) = low

I will call the hypothesis that painfulness and pleasurable experiences motivate avoidance and pursuit behavior respectively, for the motivating qualia hypothesis. If this hypothesis is correct then we should expect natural selection to create the correlations we in fact observe. If we assume that the motivating qualia hypothesis is true then we can assume that the probability of the correlations occurring would be high.

P (correlations | motivating qualia hypothesis) = high

P (correlations | motivating qualia hypothesis) > P (correlations) = high

The hypothesis that qualia of pleasurableness and painfulness motivate behavior is therefore confirmed, while epiphenomenalism is not confirmed. The easiest way of explaining these correlations is to assume that painfulness and pleasurableness can have an impact on behavior in virtue of how they feel.

If one accepts this than one should also accept an account of qualia that allows for qualia having an impact on behavior in virtue of how they feel. The idea of normative qualia as presented in this thesis allows for this.

7.3 A moral truth tracking hypothesis

In this section I am going to put forth a truth tracking hypothesis in regards to our moral intuitions. I am going to argue that we should expect moral intuitions to track moral facts in cases that are about individuals one is related to or which one strongly identifies with.

We have previously seen that moral realism has a problem accounting for the connection between moral intuitions and moral facts, See: 3. Street has argued that the moral realist needs to come up with something like a truth tracking hypothesis to account for the connection between moral facts and our moral intuitions. If nothing like this can be given then the moral realist must accept that, most probably, all of our moral intuitions are hopelessly in error. In this section I will put forth a truth tracking hypothesis of the type that Street calls for, and which she believes cannot be given. The consequence of this hypothesis is not to wholly redeem our moral intuitions. Rather it predicts that our moral intuitions will correlate with moral facts in certain cases and not in others.

Street argues that a plausible truth tracking hypothesis cannot be constructed by contrasting it to an apparently competing adaptive link hypothesis.[15] It is worth noting that the moral truth tracking hypothesis put forth here in no way conflicts with the adaptive link hypothesis. I suspect that Street takes it for granted that any truth-tracking hypothesis will conflict with the adaptive link hypothesis because she conceives moral facts as mind-independent entities.

7.3.1 Arguing for a moral truth tracking hypothesis

The moral truth tracking hypothesis states that kin selection has shaped our moral intuitions so as to generally conform to moral facts in cases about individuals one is related to or strongly identify with. There are three main reasons for believing this to be the case. I will present them as three premises of an argument for the moral truth tracking hypothesis. The first two premises have been extensively argued for.[16] The third premise has not yet been argued for, but it will be the focus of the subsequent section.

First premise; Painfulness and pleasurableness are moral facts.

Second premise; Painfulness and pleasurableness are respectively linked to what is detrimental and beneficial to the organism

[15] The adaptive link hypothesis: our moral intuitions have been selected for because they got our ancestors to respond to their circumstances with behavior that itself promoted reproductive success in fairly obvious ways.
[16] For arguments for the first premise, see: 4 and 6. For argument for the second premise, see 7.2.

Third premise; Kin selection has shaped our moral intuitions so as to generally conform to that which is beneficial to individuals one is related to or strongly identify with.

Conclusion: Kin selection has shaped our moral intuitions so as to generally conform to moral facts in cases about individuals one is related to or strongly identify with.

The reader may be wondering what it really means to say that our moral intuitions generally conform to moral facts. The reader may also wonder whether it in fact is the case that our moral intuitions do this. I will attempt to address both of these concerns with an example.

Imagine a mother that sees her toddler fall and hurt his knee. She intuitively runs towards him. She picks him up. She blows on the wound and comforts the child. She does the best she can to alleviate the pain of the child. This is only one in a million possible everyday scenarios where our moral intuitions seem to correspond with the moral facts of the matter. The mother intuitively sees the pain of the child as something bad, as something that should be alleviated. This coincides with the intrinsic badness of the painful experience had by the child. The mother's intuition can therefore be said to correspond to some moral fact.

The cynic may object that caring about others wellbeing is not the rule even with individuals one is related to or identify with. One may argue that man is a wolf to his fellow man. To this I would reply that I expect this to be the general rule even among wolfs. This follows from the view on kin selection argued for in the following section.

7.3.2 Kin selection and our moral intuitions

In this section I am going to explain and argue for the third premise of the previous argument. In arguing for the third premise I hope to avoid most of the complexities and controversies of the topic. I believe that the premise can be supported by evolutionary theory which is fairly uncontroversial and relatively straightforward.

If a trait is present in the human phenotype then this is because it increases fitness or its presence may be a byproduct of selection for some other trait. Fitness is determined by how well an individual survives and passes on its genes. If the moral intuition increases fitness and has an inheritable element, then the intuition will proliferate. A moral intuition may contribute to an individual's direct fitness. Direct fitness is defined as genes contributed to the next generation by an individual directly via reproduction.

Finding incest unacceptable or valuing the welfare of your own child higher than that of others are moral intuitions that may contribute to direct fitness. Another way a moral intuition may proliferate is by contributing to indirect fitness. Indirect fitness is defined as; genes contributed to the next generation by an individual indirectly via helping the propagation of related genes.

The willingness of childless individuals to lay down their life in the defense of their groups territory may be a candidate for a moral intuition that contribute to an individual's indirect fitness. Inclusive fitness is the sum of an individual's direct and indirect fitness. The concept of inclusive fitness makes it possible to explain several observed instances of altruism in nature. That is instances were animals help other individuals increase their direct fitness at a cost to their own direct fitness. William Donald Hamilton (1964a and b) formulated this insight into the rule:

Hamilton's rule; r B > C

Where; r = relatedness- proportion of shared genes, B = benefit to the recipient – how many more offspring are produced and C= cost to the altruist – how many fewer offspring are produced.

Kin selection occurs when an individual's inclusive fitness is increased by engaging in behavior that enhances the reproductive success of relatives. In seeing this we make great strides towards understanding how altruistic behavior can be favored by natural selection.

J. B. S. Haldne captured this logic when he jokingly remarked "I would gladly lay down my life for two brothers or eight first cousins"(Smith 1976:247) as affective patterns or evaluative tendencies that produce behavior that saves two brothers or eight first cousins at the cost of your own life would be selected for. I take it to follow that we may expect kin selection to have shaped our moral intuitions so as to generally conform to what is beneficial for related individuals.

There are good reasons not to limit the claim to related individuals but to also extend it to individuals one strongly identify with. Firstly, one need not actually be related to be perceived as being related. Secondly, it would have been the case that in small groups like the ones our ancestors lived in, everyone or almost everyone, were related.[17] A general concern

[17] For an overview of the literature on limited dispersal and kin selection, see Platt and Bever (2009)

for the wellbeing of people that you spend time with may therefore have been adaptive, as Richard Dawkins put it, "If families [genetic relatives] happen to go around in groups, this fact provides a useful rule of thumb for kin selection: 'care for any individual you often see'" (Dawkins 1979:187)

7.4 Are our moral intuitions hypocritical?

In this section I am going to point out that we should expect our moral intuitions to be hypocritical. I am subsequently going to suggest that we should understand this tendency towards hypocrisy as a cognitive bias that leads to common errors in moral reasoning. I take a hypocrite to be a person who refuses to apply to himself or herself the standards he applies to others. I believe that it is accurate to characterize our moral intuitions as hypocritical, as I believe that they lead us to apply different moral standards to ourselves and ours than we do to others. Franz de Wall writes that, «a moral system can't possibly give equal considerations to all life on earth. (….) Moral systems are inherently biased towards the in-group" (de Waal 2006:163)

What should we make of this preference for "our own" which leads us to pay less attention to the sufferings of those outside our community, than to those inside it? One thing we should not do is to take this tendency as self-justifying. I believe that Peter Singer is right when he writes that:

> Many think it right and proper to give priority to those closer to us; this was a principle of popular morality in Sedgwick's time, as it is in ours, and no doubt was throughout most of human history. Without a biological explanation of the prevalence of such a principle, we might take its near universal acceptance as evidence that our obligations to our family are based on a self-evident moral truth. Once we understand the principal as an expression of kin selection, that belief loses credibility. (Singer 1981:71)

I therefore suggest that we understand this tendency towards hypocrisy as a cognitive bias. A cognitive bias is a pattern of deviation in judgment, whereby inferences about other people and situations may be drawn in an illogical fashion. Certain cognitive biases lead to predictable patterns of mistaken judgment. (See: Haselton et al. 2005) I have already discussed an example of this in the case of unrealistic self-evaluations. (See: 2.4.3. See also Kruger and Dunning 1999).

I believe that our tendency towards hypocrisy is such a bias. It leads to a regrettable, but predictable, pattern of mistakes in moral judgment. It's only special feature is that it leads us to make wrong judgments about moral facts and not about mere facts.

All would agree that we should try to be aware of common errors of reasoning and seek to find ways to avoid or mitigate them.[18] I believe this to be the case with common errors of moral reasoning as well. Furthermore these cases are far more important, as their consequences truly are horrific.

Take one illustrative example, the case of global hunger. The United Nations estimates that global hunger could be more or less eradicated at the cost of $30 billion a year. (Rosenthal and Martin 2008) This may seem like a large sum of money. But, if one compares it to for example the US defense budget, which was $ 901.8 billion in 2015, then $30 billion seems attainable. (US-government-spending 2014) There is nothing that hinders the richer countries of the world from collectively coming up with this money. But, there seems to be no political will for this within the relevant centers of power. In addition there is very little, if any, outrage on the street about this. I take this to be one, of many possible, examples where the immorality of our actions just does not resonate with our moral intuitions.

[18] Though experiments, such as the John Roles "veil of ignorance" help to mitigate the effect of this bias. (See: Rawls 1999:118-123)

8 Addressing objections

In this chapter I will address three possible objections to the type of moral realism proposed in this thesis. Two of these objections are counter arguments to the view that normative qualia provide an adequate ground to fund a plausible moral realism. The last objection I will address is Moors famous "Open question" argument.

8.1 First objection

In this section I will address two anticipated objections to the moral realism proposed in this thesis. Both of the anticipated objections argue something along the line that the inherent values of subjective experiences do not provide an adequate ground to fund a plausible moral realism. Answering possible objections puts one in the awkward position of having to formulate both the objection and the answer. The temptation to weaken the opponent's position is always there. I hope not to have done this, because I believe they can be answered.

The first of the anticipated objections argues that one cannot fund an objective morality on a subjective fact. It is true the qualia are subjective, as qualia only exist if it is experienced by some conscious subject. By tradition, science deals with phenomena that are "objective," and avoids anything that is "subjective." Indeed, many philosophers and scientists feel that there can be no such thing as objective knowledge of consciousness, because consciousness is subjective. (Searle 1999:1937)

I will argue that it is possible to establish objective knowledge about subjective states of affairs. I take the science of psychology to be riddled with support of this claim. I believe that this objection is founded on a category mistake.

Searle (2008) has argued that this category mistake is fuelled by an ambiguity in the terms objective and subjective. One way we use the term objective is to talk of mind-independent entities. Like mountains or molecules, that is entities which existence is not dependent on us. Let us call this the ontological use of the term objective. Ontologically objective entities are thought of as contrary to ontologically subjective entities. Ontologically subjective entities are those entities that have only a mind-dependent existence, like qualia.

Another way in which we use the term objective is epistemological. We use the term objective to talk about claims that several or all individuals can be equally well placed to

determine. Epistemological objectivity is thought of as contrary to epistemological subjectivity. Epistemologically subjective claims are those claims that only one particular individual is well placed to determine. So I am by the very nature of the claim best placed to determine how I feel about the Christmas present I got. But, all the people in the room are equally well placed to determine what I got for Christmas. These to uses of the terms objective and subjective are often conflated as the two uses are normally coextensive. Claims about mind-independent entities are almost always claims that all, or several people, can be equally well placed to determine. Claims about mind-dependent entities on the other hand usually have one individual which alone has a privileged position from which to determine the claim.

After clarifying the terminology we can try to formulate the objection more precisely. The objection then is that you cannot derive an epistemologically objective moral theory from an ontologically subjective normative fact. It is true that qualia is ontologically and epistemologically subjective, but the objection is only true if there is nothing epistemologically objective that can provide justifications for beliefs about the instantiation of normative qualia. But, there are several epistemologically objective facts that may serve to justify the belief in the instantiation of a quale. I will mention just a few, like facial expressions, verbal reports, behavior, physiological responses, neurological activity. All of these and many other things may give us knowledge that qualia are manifested in the consciousness of another individual. As Searle writes:

> My pains have a subjective mode of existence in that they only exist as experienced by me, the subject. But mountains and molecules have an objective mode of existence because they exist whether or not they are experienced by any subject. It can be an epistemological objective matter of fact that I have a pain even though the mode of existence of the pain is ontologically subjective. (Searle. 2008:167)

I therefore believe that one can found an epistemologically objective moral realism on mind-dependent moral facts.

8.2 Second objection

The second objection argues that the idea of normative qualia favors egoistic rather than universal hedonism. If this turns out to be the case then all the previous talk about moral truth

tracking and an innate tendency toward hypocrisy will seem deeply confused. Contrary to this view I will argue that understanding painfulness and pleasurableness as moral facts favors universal, rather than egoistic, hedonism.

A disclaimer is in order, I do not mean to commit myself to the view that pleasure and pains are the only morally relevant factors there are.

The line of reasoning that supports the second objection seems to be that normative qualia only have intrinsic value for me. Painfulness is only bad for me. It only gives me a reason to avoid it. There is nothing in the experience of pain that gives me a reason to care about the pain of others, and noting in the experience of pleasure that gives me a reason to care about others pleasure. This view seems to lead to egoistic hedonism:

> Egoistic hedonism: it is morally right to promote the greatest balance of pleasure over pain in one's own life.

The philosopher that is committed to internalism about intrinsic value may be sympathetic to this objection, as it seems that only direct experience of qualia gives one a necessary motivating reason. (See: 4.1.2) Contrary to this I am going to argue that as long as one accepts that normative qualia are moral facts, then something like universal hedonism follows:

> Universal hedonism: It is morally right to promote the greatest balance of pleasure over pain overall.

I believe that even if the argument given above were correct, this would not lead to egoistic hedonism, as it would not alter the set of true moral claims. There would still obtain moral facts of the matter that would make it wrong for you to inflict aimless pain, even if this pain only held intrinsic value to the one that suffered it. This follows from the way I understand facts and subsequently moral facts. To explain why I believe this it is necessary to quickly recap the notion of fact that I am employing here. (See: 4.1.3) The concept of `fact` that I am interested in is the one involved in relations that make statements true or false. I hold that a proposition is made true or false by its relation to the relevant facts.

A minimal requirement that I would impose in that direction is that truth supervenes on facts. That is to say that there can be no difference in truth without a difference in fact. If there exists moral facts, then these will be a subset of facts relevant for the truth of propositions about moral matters. It follows that as non-moral truth stands in a supervenience

relation to facts as do moral truth stand in a supervenience relation to moral facts. This is to say that moral truth supervenes on moral facts, there is no difference in moral truth without a difference in moral facts.

Even though the second objection does not lead to egoistic hedonism, it may still point out something important. The individual that experiences a normative quale has a special relation to that quale. This special relation is not relevant for the truth of moral statements. But, it may be relevant to the justification of moral claims.

To clarify these points, imagine that you walk into a red room and you see that the room is red. This will give you justification for believing that the room is red. Now imagine that you are completely blind and that you walk into the same room. This time the experience gives you no justification for the belief that the room is red. But, in both cases the proposition "the room is red" is true, given the fact of the matter.

Analogously, imagine getting tortured for no particular reason. This experience may give you justification for the belief that torturing people for no particular reason is wrong. Now imagine a scenario where someone else gets tortured for no particular reason and that you do not hear about it. In this scenario your experience gives you no direct justification for the belief that torture is wrong, as you experience neither pain nor sympathy in relation to the torture. In both cases the proposition "torturing people for no particular reason is wrong" is true. It is true given the relevant facts of the matter, the relevant facts of the matter being the painful experience had by the victim of torture.

If one believes that normative qualia are moral facts, then this should lead one to accept universal rather than egoistic hedonism. For even though normative qualia always are directly experienced from a first person perspective, this does not hinder moral facts from obtaining outside one's own conscious experience. Even if you do not directly experience the pain of torture, relevant moral facts may obtain such that the proposition "torturing people for no particular reason is wrong" can be true, in virtue of correspondence to the relevant facts of the matter.

8.3 The open question argument

Moore`s open question argument is often put forth as an objection to naturalistic moral theories. In this section I will argue that the position this thesis argues for falls outside of the scope of the open question argument.

The open question argument was put forth by Moore (1903) in "Principia Ethica". The argument aims at refuting any identification of the moral property of goodness with a natural property. Moore's open question argument may seem highly relevant to this thesis, as this thesis argues a view that understands moral properties as natural properties and equates pleasure and moral goodness. To see why I believe that the open question argument is not relevant to this thesis one has to get clear on the shape of Moore`s argument. The argument takes the form of a syllogistic modus tollens;

> Premise 1: If X is (analytically equivalent to) good, then the question "Is it true that X is good?" is meaningless.
>
> Premise 2: The question "Is it true that X is good?" is not meaningless (i.e. it is an open question).
>
> Conclusion: X is not (analytically equivalent to) good. (See: Moore 1903: 62–69)

Moor's point seems to be that asking; "Is pleasure the good?" is not a stupid question in the same way as asking "Is the bachelor an unmarried man?" is a stupid question. Asking "Is the bachelor an unmarried man?" is a stupid question in the sense that if you need to ask it, then you do not understand the concepts involved.[19] Moore argued that the question "Is pleasure the good?" was an open question, as the answer to the question was not determined by the meaning of the concepts involved.

Therefore pleasure and the good are not identical, at least not identical in the same way as bachelors and unmarried men are identical. The open question argument states that an identity relation between goodness and some naturalistic property cannot be established on the basis of the meanings of the concepts. Notice that the open question argument is directed against a similar position to the one argued for in this thesis. But, it is directed against a

[19] I am not convinced that asking is the "Is the bachelor an unmarried man?" necessarily is such a stupid question. But, let us grant that it is, for the sake of argument.

wholly different argumentative strategy than the one employed in this thesis. Suppose one was to argue a priori that the morally good could be analyzed as that which contributes overall to the greatest happiness of the greatest number. Then argue that contributing to the greatest overall happiness of the greatest number should be taken as a naturalistic property as it figures in the empirical science of psychology. This was what Hedonists such as Jeremy Bentham did. It was this type of argument that was the original target of Moore`s open question argument. (E.g. Bentham 1983)

Bentham's theory is a naturalistic one but it is a different type of naturalism than the one committed to in this thesis. Bentham's theory is metaphysically naturalistic in that it argues for a view that sees moral properties as naturalistic properties. Methodologically it is analytic, seeking to establish the link between naturalistic and moral properties by use of conceptual analysis.

This thesis is committed to methodological naturalism and none of the arguments for the view proposed are arguments from conceptual analyses. The argumentative strategy here proposed is to postulate a realm of normative facts in virtue of the contribution they would make to the a posteriori explanation of features of our experience. I have argued that the good can be rightly interpreted as standing for the naturalistic property of pleasurableness. I have tried to show that interpreting it as such contributes to the a posteriori explanation of features of our experience. I have in no way suggested that this interpretation can be derived at by analysis of correct use of common English.

I believe that the open question argument doesn't affect a posteriori arguments for an identity relation between pleasure and the good. (Railton 1989) The open question argument does damage to analytic arguments for an identity relation between pleasure and the good, but it leaves methodologically naturalistic arguments for the same unscathed.

That the question "Is pleasure the good?" is an open question does nothing to subtract from it as a definition of pleasure as the good if this facilitates the construction of a worthwhile theory. Whether or not a reforming definition is ultimately acceptable is an a posteriori matter. The equivocation of painfulness and the bad, and pleasurableness and the good, as argued for in this thesis, are rightly understood as reforming definitions. The view argued for in this thesis is therefore not affected by the open question argument.

9 Reflections and concluding remarks

To conclude I will give a short summery of the thesis and offer some suggestions for further investigation. After this I will provide some reflections on the philosophical style of the thesis, I will try to highlight what I take to bee its particular merits. Before offering a final concluding remark on what practical consequences the ethical position I have put forth should have, if one where to take it at all seriously.

9.1 A summary notes

In this thesis I have attempted to investigate questions concerning moral realism with a biological perspective.

Several concerns arise for the moral realist that takes seriously the idea that our moral capacity is a biological system produced by natural selection. In the first part of the thesis I tried to articulate some of these concerns. The first concern this perspective raises is the possibility that we may be shaped by natural selection; so as to believe that some things are morally good and others morally bad, without anything in nature actually being morally good or bad. The second concern that was raised was whether our moral intuitions are at all trustworthy. How could our moral intuitions possibly have evolved to correspond to moral truth?

In the second part of the theses I put forth a conception of moral realism that I believe can address these concerns. The second part of the thesis argues that there exists a quale of painfulness and one of pleasurableness. It argues that these qualia are intrinsically valuable and rightly understood as moral facts. It then goes on to argue that if one accepts that painfulness and pleasurableness are moral facts, then one can expect that our moral intuitions track moral facts in certain situations and not in others.

The novelty of the biological perspective on moral realism is that it suggests that moral facts have to, in some way, be a part of the human organism for there to be any connection between moral facts and our moral intuitions.

9.1.1 Suggestions for further investigations

There are several related issues that would be relevant if one where to develop this line of thought any further. One of these issues is how far a debunking argument of the type given

in part one really generalizes. A particular interest is whether such an argument can be given in relation to our logical and mathematical capacities.[20] Another issue is whether there are other phenomenological phenomena that have inherent value.

9.2 Reflections on the thesis project

Throughout this thesis I have tried to take account of the relevant science. In the introduction chapter this was spelled out as a methodological commitment. But, the attempt to incorporate relevant scientific insight into my philosophical inquiry stems not only form a methodological consideration. In addition it stems from a view on what the appropriate content of contemporary philosophy is.

In the 1920s Dewey offered a diagnosis of the state of philosophy, it is a diagnosis that I believe still holds today. Dewey wrote that:

> The problem of restoring integration and cooperation between man's beliefs about the world in which he lives and the values and purposes that should direct his conduct is the deepest problem of modern life. It is the problem of any philosophy that is not isolated from that life (Dewey 1988, 204).

"How should one live one's life?" and "What ends are worth pursuing?" These are questions that are relevant to everyone. Questions about what norms should shape social interaction and what rules and institutions that should govern society are ever pertinent. Questions like these arose for the Ancient Greeks as they arise for us today, as they arise for all people at all times.

Such questions always arise from the lived life of people and from the particular conditions they find themselves in. About such questions Kitcher writes:

> They are questions that are urgent for all people—or at least for all people who have any chance of directing the course of their lives. They deserve answers that not only are pertinent to the situations in which people find themselves but also are as well informed as possible about the character of the world in which we live (including what is known about ourselves). (Kitcher 2011:252)

Hence the emphasis one the importance of integrating the contributions of various forms of inquiry, and of connecting them with our search for what is valuable. In this thesis both the

[20] For a discussion of this issues, See: Schechter (2013) Clarke-Doane (2012).

topic of inquiry and the way of inquiring has been motivated be a desire for a philosophy that is not, in Dewey's words, isolated from life.

In this thesis this commitment has fond expression in an attempt to integrate a biological perspective in to an inquiry of moral realism. I believe that the incorporation of a biological perspective on ethics is appropriate but, not unproblematic. Morality is something we engage in, it is we who make moral judgment and preform moral or immoral actions, and we are biological organisms. If one accepts this than it follows that what we know of how we function and how we came to be the type of organism that we are will have relevance for how we understand morality.

I am in no way suggesting that biology ever will be able to provide answers to ethical questions. But, biology may reveal that some of the answers that are proposed are wrong. This may be the case if the proposed answer entails a causal history or capacity that the human organism does not have. I believe that the idea of mind-independent moral facts may be such a case, were biological insight provides a weighty argument against a certain way of understanding morality.

Many are suspicious of attempts to bring biology in to ethics. This suspicion may be understandable in the light of history. It may even be a helpful, response to previous missuses of biology. Biology has at times been a heavily politicized field, and a healthy skepticism may help guard against misuses of the science, of which there were plenty in the last century. The most extreme politicization of the subject can be found in Nazi-biology (See: Bäumer-Schleinkofer 1995). The Soviet Union also had its own distortion of the science in Stalinist-Lysenkoism. (See: Graham 1993) These are two of the most extreme cases but they are far form the only ones. The conflation of moral and biological language has often been used to justify the injustices of society, by construing them as expressions of nature. Think for example of the idea of racial hierarchies and the practice of eugenics. This legacy places an obligation on the philosopher that wants to address ethical issues form a biological perspective. But, it does not subtract from the contribution that a biological perspective may bring to our understanding of morality.

9.2.1 Concluding remarks

If one found the position put forth in this thesis at all compelling then one may be wondering how this view of ethics should inform how one evaluates moral matters.

I have argued that we should have a general expectation that our moral intuitions correspond to moral facts only in cases about individuals one is related to or identify with. If true, then this should lead one to second guess one's own gut reactions when faced with moral dilemmas. It should also lead one to be selective in one's use of moral intuitions in ethical arguments.

As we cannot escape our innate evaluative tendencies we should in addition seek to expand that natural capacity for sympathy that makes one care about the wellbeing of ones friends and family. This is not a novel idea. Versions of it can be found in several ethical schools of thought. Peter Kropotkin expresses the idea eloquently when he writes, that:

> Man is appealed to be guided in his acts, not merely by love, which is always personal, or at the best tribal, but by the perception of his oneness with each human being. (Kropotkin 1902:247)

I believe that we should attempt to cultivate a feeling of fellowship and concern, even beyond the boundaries of humanity, to encompass all creatures that can suffer or feel joy.

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